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CONTENTS

N.U.R. and T.U.C. Wages Policy

THE National Union of Railwaymen has been among the most restive of the unions in the matter of wages stability and the most critical of Government policy. Mr. J. B. Figgins, General Secretary of the N.U.R., has been to the forefront in pressing the claims of railwaymen for higher pay. In the May 5 issue of *The Railway Review*, the organ of the N.U.R., he bluntly criticises the Trades Union Congress General Council, because it still supports the policy of wage restraint which was decided on at the conference of trade union executives last January. Mr. Figgins declares that the General Council will have to face the fact that since the conference the view of a number of unions has changed, and that there is no longer a majority for the policy. He argues that the General Council should make a public pronouncement that it no longer supports Government policy on wages, and thus restore to the trade unions a measure of freedom of negotiation. Mr. Figgins goes further, for he advocates the annulment of Arbitration Order No. 1305, so that the full rights of voluntary negotiations between workers and management may be restored. He is also very critical of Government policy in regard to capital expenditure. He bases this on the fact that the inability of the Railway Executive to carry out all the reconstruction of British Railways necessary to attract business and improve their finances, in addition to eliminating a considerable amount of uneconomical expenditure, reacts on the workpeople. Of the decision to increase railway freight charges as from next Monday, all that Mr. Figgins has to say, apart from referring to the Government's delay in implementing the recommendations of the Charges Consultative Committee, is to refer to a statement he made last year that the union could not accept the position that the wages of railwaymen were to be determined on the basis of subsidising private enterprise through cheap rate charges. Mr. Figgins seems wedded to the very narrow view that the sole purpose of British Railways is to provide additional remuneration for the lower-paid staff. Even as a short-term policy that position would be untenable; in the longer term, it could only prove disastrous both to British Railways and their employees.

Mr. R. F. Morkill

MR. R. F. MORKILL, sometime Joint Signal Engineer, London Transport, and latterly an officer of the Ministry of Transport, whose death we recorded briefly last week, and of whom a portrait and biography appear in this issue, had been in the service of the Metropolitan Railway and then of the London Transport organisation during an interesting period of signalling development. Several installations on the Metropolitan were rebuilt while he was in charge of its Signal Department, and the opening of the Stanmore line saw the application of remote-control principles to the operation of the points and signals at the branch terminus. His Presidency of the Institution of Railway Signal Engineers in 1944-45, on which he entered during a particularly trying period of the war, saw the introduction of new artic'es of association, in the framing of which he had taken a considerable part. He had many friends on the French and other Continental railways, and in Army and Civil Defence circles. At the Ministry of Transport he was often called on to receive members of the signalling industry faced with difficult problems of supplies and restricted facilities, especially during the war, and they always found him ready to give all the aid in his power.

Present Level of Steel Prices to Remain

SINCE the Minister of Transport gave his decision on the recommendation of the Charges Consultative Committee that the British Transport Commission should be granted its application for higher freight charges there has been considerable anxiety as to their likely effect on industry in general. It has been estimated that the N.C.B. will have to put up its prices for industrial coal by an average of 1s. 6d. a ton, while in the case of steel, which industry again showed a record output last month, the higher freight charges due to take effect on May 15 will result in an increase in steel making costs of about 10s. a ton of finished steel. Users of steel, however, will welcome the news that, because of the high outputs now being achieved and the consequent savings in the import programme, the existing level of prices will be maintained at least for the time being. This decision, which was announced by the British Iron & Steel Federation on Friday in last week, shows an appreciation by the industry of the importance of avoiding any action that might further aggravate the spiral of inflationary price increases, which must weaken the position of the steel using industries in overseas markets.

Road Haulage Rates Increased

THE Road Haulage Executive has announced that the increased cost of oil fuel, enhanced replacement charges and other recent increases in costs not arising from the Budget, such as a higher wage bid, dearer tyres, and the increase in the price of petrol before the Budget, have obliged it to raise its rates. In addition to adjustments already required where basic rates have been unduly low and uneconomic, a surcharge of 7½ per cent. will apply to all general haulage and parcels charges. The Executive inherited various rates from the haulage companies which it took over, and in certain instances, some companies were charging a far lower rate than others for carrying similar goods over similar distances. The Executive aims to remove such discrepancies until the British Transport

Commission's own charges scheme is in operation. Next Monday, May 15, when the new road haulage rates become effective, is also the date on which the Minister of Transport proposes to put into force the increased railway and canal freight charges of 16⅔ per cent., recommended by the Charges Consultative Committee, as stated in our May 5 issue.

Irish Transport Bill Progress

THE final stages of the Irish Transport Bill have now been taken in the Dublin Senate. Among some of the amendments which have been made is one which changes the date of the operation of the Bill from April to June. The original intention was that the Bill should become effective from January 1 last, but the proceedings have proved far more protracted than was at first expected. C.I.E. affairs were also the subject of a statement by the Irish Minister of Finance, during his Budget speech. He pointed out that to ease the immediate difficulties of C.I.E., £450,000 was being provided to meet debenture interest payments. He went on to indicate, however, that no further grants would be made, and said that it was imperative that by economies, and if necessary by increased charges, the company, as soon as possible, should put itself in a position to pay its way without the aid of the taxpayer. Under the Bill there would appear to be little prospect of effecting reductions in the major costs of the undertaking, because of the provisions to safeguard the rights of the staff. On a short-term basis, C.I.E. may have to resort to higher charges if it is to pay its way, while awaiting whatever economies may resolve from the re-organisation effected as a result of the Bill.

Overseas Railway Traffics

THOUGH there was a slight increase in Canadian National operating expenses during March, operating revenues advanced from £13,812,000 to £14,955,000, and net revenue amounted to £1,023,000. C.N.R. expenses for the month were £402,000 higher at £13,932,000, but on the aggregate amount to £39,174,000, and are still £88,000 below last year's figure. Operating revenues at the end of 13 weeks are up by £341,000 at £38,890,000; there is a £284,000 deficit in net revenue, as compared with a £713,000 deficit last year. Gross earnings of the Canadian Pacific during March were £446,000 higher at £10,743,000, and expenses fell by £371,000 to £9,655,000, so that net earnings were £1,088,000, as compared with £271,000 for the equivalent period of 1949. On the aggregate, C.P.R. gross earnings are down by £793,000 at £27,726,000, though net earnings are £348,000 higher at £454,000. Antofagasta (Chili) & Bolivia traffics advanced by £26,220 during the fortnight ended April 30, and aggregate results are now £1,029,744, or £120,310 lower than for last year.

Canadian Pacific Railway

THE continued deficiency in the earnings of the railway was stressed by Mr. W. A. Mather, President of the Canadian Pacific Railway, in his address last week to the annual general meeting; and the reduced traffics may be the first of further, if temporary, decreases. Restrictive rate legislation continues to bear hard on the company; rate relief already granted has been too little and too late, and problematical rate increases now *sub judice* (and opposed by the Provincial Governments) seem to offer small hope of radical improvement. Such increases are opposed largely in the interest of the national economy; it is in the same interest that the company is opposed to wage increases departing substantially from the recommendations of Government-appointed arbitrators, refraining from a course which must involve further increased transportation charges to the public. Nevertheless, a bold (even if, by its own standards, much reduced) programme of capital expenditure, including continuance of dieselisation, shows that the company is by no means discouraged; it "accepts regulation as something necessary and useful and not inconsistent with private ownership and operation," but is ready to act as vigorously as restrictions allow.

British Industries Fair

LAST year at the British Industries Fair there was evidence of an increasing appreciation of changing market conditions abroad and this was very apparent in the special efforts made by manufacturers to meet individual needs. This trend is even more marked this year. At the fourth B.I.F. since the war, which opened in London and Birmingham on Monday last, buyers are expected in even greater numbers, some 15,000 in fact, and those who are here on a repeat visit will find that the heavy industries section at Castle Bromwich is again of record size. They will also find a considerable increase in the range of heavy plant and machinery available for export and at better delivery dates than last year. Mechanical handling equipment should attract much attention. A new feature is a stand staffed by personnel of the Department of Commerce, U.S.A., who are providing information on American markets generally and directing British manufacturers to the right quarters for answers to specific queries. Exhibitors have responded to the request to emphasise goods likely to appeal to buyers from dollar and other hard currency markets.

Accidents on Indian Railways in 1948-49

DURING the year ended March 31, 1949, there were 54 collisions involving passenger trains running on Indian railways, but it is satisfactory to note that this figure represents a continuation of the steady decrease in such accidents, as the corresponding figures for the four previous years were 91, 73, 51, and 48. In the case of derailments of passenger trains also, the figures for the three years 1946-49 showed an improvement, being 396, 308, and 285. In the latter year, there were 31 cases of deliberate train-wrecking, and 169 instances of attempted train-wrecking, the relevant figures for 1947-48 being 42 and 161. Accidents at level crossings in which trains ran into road vehicles numbered 145, as compared with 192 in the previous year. The numbers of persons killed and injured in accidents to trains, rolling stock, and permanent way were as follow:—

	1947-48		1948-49	
	Killed	Injured	Killed	Injured
Passengers	299	763	88	363
Railway servants	21	195	27	252
Other persons	39	111	102	161
Total	359	1,069	217	776

On the whole, therefore, there was considerable improvement in the year under review.

The Railway Convalescent Homes

IN very different circumstances from those obtaining under the National Health Service Act, the need for a railway convalescent home for railwaymen became pressing in the closing years of last century. The early steps were taken by John Edward Nichols, Cashier of the old London, Chatham & Dover Railway, and, after great struggles, the initial difficulties were overcome successfully with the aid of John Passmore Edwards, the philanthropist. The original committee was formed on January 19, 1899, and the first Home was opened at Herne Bay in 1901; thrice it has been extended, and now has 111 beds; Leasowe followed in 1911; Ilkley in 1915; Dawlish in 1918; Lavenham (opened in 1914 as the Railwaywomen's Convalescent Home) was amalgamated in 1921; Ascog was added to the list in 1924; Par in 1925; Margate in 1927; and Buxton (acquired through a generous gift from American railwaymen) in 1946. These provided a total of 527 beds and 20 cots, before the addition of the tenth Home, at Llandudno last Tuesday. The basis of the finance was a contribution of ½d. a week (since 1946, 1d. a week) from the members.

For many years, these contributions were collected personally by the Committee, but between 1923 and 1928 the collection was transferred to the pay sheets throughout the main-line railways, and this assistance is continued by the Railway Executive. There are upwards of 360,000 railway employees contributing on a voluntary basis, and membership includes wife and baby under 9 months. Some illustrations of the tenth home, at Llandudno, and a brief account of the opening, appear elsewhere in this issue.

London Area Passenger Charges Scheme

OUR issue of March 3 contained details of the Draft London Area (Interim) Passenger Charges Scheme prepared by the British Transport Commission for submission to the Transport Tribunal in accordance with Section 76 of the Transport Act of 1947. This scheme, relating only to passenger traffic, proposes to establish as far as possible equality of fares for journeys of a similar length, and remove those anomalies which now discourage people from using the more convenient means of transport for particular journeys. The scheme covers all the London Transport areas, the suburban services of British Railways in the area served by London Transport buses, and the London, Tilbury & Southend line.

The intention of the B.T.C. is to apply both to London Transport and British Railways a new standard scale based generally on a rate of 1·25d. a mile. This will involve an increase of ordinary single fares on London Transport services, other than coach fares, but at the same time the cost of travel for many London area passengers on Railway Executive services will be less. At present the season ticket rates in operation on the lines of the Railway Executive are 55 per cent. above 1939, while those on London Transport railways are only 25 per cent. above pre-war, and here also a common standard scale is proposed by the B.T.C. Most season tickets on British Railways will therefore be cheaper.

The estimated net effect of the suggested fare alterations would be to increase gross transport receipts in the London area from £74½ million to about £77½ million in a full year. This increase of £3,000,000 therefore represents a considerable increase in fares which is most noticeable in the new scales for London Transport ordinary single fares and in the early morning return fares which are to replace workmen's fares. Against this anticipated increase in revenue, however, must now be set the increased costs to rail and road haulage resulting from the decision to increase the duty on petrol and oil, which will cost London Transport some £1,125,000 a year.

The issue is expected to be keenly debated before the Transport Tribunal which opened its inquiry on Tuesday last. There have been notices of objection from 109 organisations representing over 10 million people and they include the T.U.C. as well as the L.C.C. and other county and borough councils in the area. Though the hearing may last several weeks, the British Transport Commission is seeking authority to introduce the scheme on October 1 next, when the conversion of South London trams to buses is due to begin. Presiding at the inquiry is Sir W. Bruce Thomas, and on Tuesday last Mr. Lionel Heald, K.C., opened the case for the B.T.C.

One significant fact has already come to light. Statements submitted to the Tribunal by Mr. R. H. Wilson, Comptroller, estimate the gross working profit from all operations this year at £38·1 million, comprising £17·8 million from railways, £2·4 million from London Transport, and £11·6 million from other principal activities, and income from interest, rents, and so on, £6·3 million. Additional income expected by the B.T.C. is £10·5 million from a full year of higher freight charges and a net increase of £3·2 million in respect of the proposed London passenger scheme. These items total £13·7 million, which, when deducted from the 1950 deficit of £15·1 million, give a loss of £1,400,000, which is very near the estimate for the extra duty to be paid by London Transport on petrol and oil. Despite this fact the Commission will not ask for an amendment.

Higher Freight Charges in Northern Ireland

THE Ulster Transport Authority has announced that rates for all merchandise and livestock by its road and rail services, parcels and other merchandise by passenger train, and parcels by buses, will be increased by 10 per cent. as from June 1. In announcing its decision, the Authority has gone to a great deal of pains to ensure that traders, Chambers of Commerce, Government Departments and so forth, shall be fully advised as to the necessity for the increase. It has distributed a leaflet in which it gives a number of salient facts. The first year's operation of the U.T.A. resulted in a loss of £165,000 and there has been a further serious recession in the past six months. Traffic has fallen and among costs which have risen, petrol and fuel oil and other Budget increases will cost the U.T.A. £250,000 in a full year. Devaluation has resulted in costs of materials rising by £60,000 a year. Coal, of which the U.T.A. uses 60,000 tons a year, is 200 per cent. above pre-war without allowing for quality. Rates and fares are about 50 per cent. above pre-war, whereas the wholesale price index figure is 126 per cent. higher.

For the year to September 30, 1949, the loss on freight traffic by road was £93,000; the losses on railway freight traffic may be taken as being *pro rata* to the smaller tonnage. For the first six months of the current financial year, the loss on the road freight working was much worse than last year and including the increased Budget taxes, the loss for a whole year was estimated to be about £300,000. No improvement of methods or organisation can offset a loss of this magnitude in the conditions in which the U.T.A. has to provide services. It is a common carrier, and as such it must accept what is tendered to it. For every one of its road freight vehicles there are 22 privately-owned, apart from agricultural road units.

In an endeavour to cope with the situation, the U.T.A. points out that it has withdrawn unremunerative rail services, on which no amount of co-ordination could have avoided losses being made. It is estimated that when the resultant economies are fully achieved, which it is recognised will require time, and also permission by Parliament to abandon sections of railway as distinct from withdrawing services, the saving in a full year will be some £250,000.

So far there has been little reaction to the announcement of the increase in charges. This may have been helped to a considerable extent by the frankness of the leaflet, which not only places the facts before the parties concerned, and expresses regret at the necessity for increasing the rates, but adds that: "it is true that there are many faults in the organisation of the U.T.A. and many improvements must, and will, be made, but these will take time." It may well be that criticism has been disarmed by the tone of the leaflet. Anyway it is a commendable approach towards a better understanding between traders and the transport authority.

Trade with Pakistan and India

DURING the past two years the need for improving trade relations with overseas countries has been increasingly evident, and for this reason importance attaches to a recent visit to Pakistan and India by Mr. Maurice J. Watt, Commonwealth Trade Department, Federation of British Industries, whose views on the possibilities for trade in those countries were given at the press conference in London last week. Mr. Watt has made two tours of Pakistan, the first on behalf of the F.B.I., and the second as Adviser to the United Kingdom Industrial Mission, which is to report to the President of the Board of Trade in the near future. It would appear that there is comparatively little industrial development in Pakistan at the present time, and in the past the country has largely relied on the production of food grains and other raw materials. Plans are in being for the establishment of industries which will utilise these materials and much help will be needed from outside. When conditions improved the tempo of industrial development would depend to a considerable extent on the development of electric power and water supplies. There is increasing competition from Japan.

Since Partition, said Mr. Watt, great progress has been

made in India, though recently a feeling of frustration seems to have prevailed owing to the slowing up in development by both Government and private enterprise. Overseas capital, more especially British capital, seemed to have been less nervous than Indian capital. It was considered that, owing to shortage of technicians if for no other reason, the Government was unlikely to consider nationalisation of industries other than those already announced. Plans for development had had to be severely cut because of the inability of the Indian taxpayer to meet the cost. Mr. Watt said, however, that negotiations were proceeding with foreign countries for the establishment of a machine tools factory, heavy electrical plant manufacturing project, steel projects, and so forth, and he also referred to the agreement made at the end of 1949, and recorded in our December 16, 1949, issue, for the L.M.A. to supply technical assistance for locomotive manufacturing works at Chittaranjan. There is ample evidence that British participation in industrial development in India is welcome.

South African Railways & Harbours

RECORDS were created in almost every activity of the South African Railways & Harbours Administration during the year ended March 31, 1949, the report for which has been sent to us by the General Manager, Mr. W. Heckroodt. The year, however, ended with a deficit of £3,941,418. Although harbours showed a surplus of £2,437,809 and airways one of £379,468, railways, steamships, and airports incurred deficits of £6,094,190, £143,344, and £21,161 respectively. Traffics under almost all heads exceeded the records of 1947-48. The following are some results:—

	1947-48	1948-49
Railways	Thousands	
Passenger journeys	243,695	254,455
Goods tonnage conveyed	51,898	54,671
Passenger train-miles	21,291	21,907
Mixed train-miles	5,721	5,599
Goods train-miles	51,007	53,432
Total train-miles	78,019	80,938
Total ton-miles	10,645,025	11,358,480
Railways—	£ thousands	
Passenger receipts	13,376	13,456
Parcels and mails receipts	2,080	2,272
Goods receipts	48,545	53,104
Miscellaneous receipts	2,490	2,360
Total receipts	66,491	71,192
Working expenses	47,140	52,407
Depreciation	4,170	4,492
Total expenditure	51,310	56,899
Harbours—		
Revenue	4,936	5,595
Expenditure	3,392	3,557
Steamships—		
Revenue	414	335
Expenditure	470	478
Airways and airports—		
Revenue	2,942	3,406
Expenditure	2,560	3,048
Surplus or deficit (all services)	241	3,441
Net-revenue appropriations	850	500
Deficit	£609	£3,941

Notwithstanding the increased number of private motors on the roads, passenger traffic reached a new high level, passing the 250 million mark for the first time. All suburban services except one showed considerable increases.

The report states that despite a general increase in charges, working results since the close of the year have continued to reflect monthly deficits, and that with the resources at the disposal of the Railways & Harbours Department, and bearing in mind the existing basis of charges and the nature of the traffic handled, the present level of expenditure is virtually beyond the administration's earning capacity.

During the year £15,034,662 was spent on new and improvement works on open lines, an advance of £2,401,543 on the previous year. At the end of March, 1949, the track equipped for electric traction totalled 1,269 miles, compared with 1,226 for the previous year. The quantity of petrol, aviation spirit, and other white oils conveyed in bulk from ports exceeded all previous records. Coal hauled from collieries amounted to 20,398,743 tons.

A total of 84 new steam locomotives was placed in traffic, including 28 heavy main-line (15F) and three of a new type (class 24) designed for branch line working. With delivery from Britain of 12 electric locomotives, the number in service was brought to 216. There remain the two diesel-electric locomotives which came into service in 1939.

Of the 117 new coaching vehicles, 78 were trailer cars and 30 motor coaches for suburban electric services, the latter built in Britain. While substantial additions were made to the wagon stock, demand remained in excess of the available supply.

British Transport Commission Traffic Receipts

THE traffic receipts of the British Transport Commission for the four weeks to April 23 made a very disappointing showing, especially after the improvement recorded in the previous return. On this occasion the total traffic takings of the Commission show a decline of £521,000, as compared with the similar period of last year, whereas for the previous four weeks the increase was £110,000. The losses recorded in passenger takings were particularly unsatisfactory, because the current statistics include the Easter holiday traffic.

British Railways recorded a total decline of £326,000 in takings. Revenue from passengers was lower by £596,000 and merchandise and livestock brought in £26,000 less than for the corresponding four weeks of 1949. There was a small advance of £13,000 in receipts from parcels by passenger train; mineral traffic yielded £117,000, and coal and coke movements £166,000 more than a year ago.

There was an increase of £31,000 in revenue derived from provincial and Scottish road passenger transport, but all sections of London Transport show declines; railways of £35,000, buses and coaches of £139,000, and trolleybuses and trams of £54,000, a total of £228,000. Inland Waterways contributed an addition of £2,000, a loss of £1,000 on tolls being more than compensated for by a gain of £3,000 in freight charges.

	Four weeks to April 23		Incr. or decr.	Aggregate to April 23		Incr. or decr.
	1950	1949		1950	1949	
	£000	£000	£000	£000	£000	£000
British Railways						
Passengers	8,575	9,171	— 596	27,492	29,007	— 1,515
Parcels, etc., by passenger train	2,196	2,183	+ 13	8,541	8,372	+ 169
Merchandise & livestock	5,899	5,925	— 26	25,087	25,616	— 529
Minerals	2,287	2,170	+ 117	9,398	9,290	+ 108
Coal & coke	5,190	5,024	+ 166	21,911	21,300	+ 611
	24,147	24,473	— 326	92,429	93,585	— 1,156
Road Passenger Transport, Provincial & Scottish						
Buses, coaches & trolleybuses	2,658	2,627	+ 31	9,610	9,377	+ 233
London Transport						
Railways	1,094	1,129	— 35	4,416	4,475	— 59
Buses & coaches	2,354	2,493	— 139	9,191	9,307	— 116
Trolleybuses & trams	817	871	— 54	3,241	3,314	— 73
	4,265	4,493	— 228	16,848	17,096	— 248
Inland Waterways						
Tolls	49	50	— 1	210	214	— 4
Freight charges, etc.	61	58	+ 3	250	255	— 5
	110	108	+ 2	460	469	— 9
Total	31,180	31,701	— 521	119,347	120,527	— 1,180

For the 16 weeks of the year the Commission's traffics now show a decline of £1,180,000, of which £1,156,000 has accrued on British Railways. Railway passenger receipts are lower by no less than £1,515,000 and merchandise takings have declined by £529,000. Parcels by passenger train show an increase of £169,000, minerals of £108,000, and coal and coke of £611,000.

The weakness of the present position is indicated if a comparison is made with 1948. For example, taking the first 16 weeks of that and this year in each case, the total receipts of British Railways have declined by 5·2 per cent. Passenger receipts have fallen by 15·6 per cent. and merchandise receipts by 8·2 per cent. Similarly, the decline on the London Transport system for the 16 weeks of this year is 1·4 per cent., but this is superimposed on a fall of

1·2 per cent. last year. The decline as compared with 1948 may indicate that the volume of travel in the London area has passed its peak. If this should prove to be the case, it may raise long-term implications of great importance. In any event, the position indicated in the figures is not a hopeful augury for increased revenue being obtained from higher fares.

The following table gives the percentage variation of the various classes of receipts between this and last year.

PERCENTAGE VARIATION 1950 COMPARED WITH 1949

	4 weeks to April 23	16 weeks to April 23
British Railways :—		
Passengers	— 6·5	— 5·2
Parcels	— 0·6	— 2
Merchandise & livestock	— 0·4	— 2
Minerals	— 5·4	— 1·1
Coal & coke	— 3·3	— 2·8
Total	— 1·3	— 1·2
Road Passenger Transport	— 1·1	— 2·4
London Transport :—		
Railways	— 3·1	— 1·3
Buses & coaches	— 5·5	— 1·2
Trolleybuses & trams	— 6·2	— 2·2
Total	— 5	— 1·4
Inland Waterways	— 1·8	— 1·9
Aggregate	— 1·6	— 0·9

Eliminating the Hot Box

AN editorial note in our December 30, 1949, issue drew attention to the considerable losses caused by axleboxes running hot in freight trains; during 1948, there were 411 derailments in the United States as a result of overheated wagon axleboxes, which cost the railways $2,223,000. Apart from these serious casualties, the delay to trains in setting out wagons with hot boxes, and the delay to consignments loaded in the wagons affected, account for further loss. American railways are not disregarding this matter, however, and a recent issue of the *Railway Age* contained some encouraging information concerning the outcome of steps taken by the New York Central system to overcome hot box difficulties.

A year or so ago the New York Central began operation of a fast freight-service called the "Pacemaker," with running speeds up to and exceeding 60 m.p.h. For this service special 40 ft. 6 in. all-steel bogie box wagons were built; the rated capacity of each wagon is 100,000 lb. (44 tons 12 cwt.), but on the "Pacemaker" runs this is limited to a maximum of 50,000 lb. (22 tons 6 cwt.), and the actual average loading per wagon is about half the latter figure. The wagons tare 45,000 lb. (20 tons). Since the "Pacemaker" began operation, 724 of the wagons have been in service continuously; by stages, a further 193 have been added, and the total is now 917. The average monthly mileage of each wagon is 3,482, and by the end of August, 1949, an aggregate mileage of 115,000,000 had been run, in the whole of which the total number of journal heatings recorded were nine. From October 5, 1948, to November 10, 1949, not one hot box had been reported in these trains during a period when the wagon-miles on this service had totalled 42,000,000.

As these are high-speed freight trains on long continuous runs, this is a remarkable record. It has not been achieved by the use of roller bearings, which the New York Central regards as the ultimate solution to the passenger coach hot-box problem, but a costly remedy in general freight service. These wagons have steel wheels, 5½ in. × 10 in. journals, and the axleboxes are fitted with tight lids, deflector strips, and packing retainer springs, all of which are thought to have contributed to the successful results, as well as the drawgear, which is protected by rubber pads. The second important factor has been the limitation of wagon loading, so that the maximum load on a projected bearing area in any axlebox could not exceed 199·2 lb. per sq. in., and the average load has not exceeded 135·1 lb. per sq. in. Also, as the wagons concerned are confined to the N.Y.C. system, they probably receive better servicing and attention than the average wagon; moreover, as the "Pacemaker" wagons are run largely in block formations from start to finish, they seldom need to be handled over the humps of marshalling yards.

Arising out of this experience, Mr. F. K. Mitchell, Manager of Equipment, New York Central System, in a paper read to the Pacific Railroad Club last November, recommended the adoption of certain standard axlebox procedure for the ordinary wagons interchanged between railways, so as to reduce the number of heating casualties. He stated that a packing retainer should be installed in every axlebox which would be capable of holding the packing in place under impact, regardless of any movement of the wedge, bearing brass, or other parts of the box. Journal box lids and dust guards should be kept as tight as possible, and suitable methods used to ensure that water and dirt are kept out of axleboxes; and every railway should insist on better servicing of axleboxes and on more care being taken to see that dirt is kept out of the journals. Under this heading, also, came the advice that defective wagon wheels should be replaced at the earliest possible moment. Mr. Mitchell also recommended an active country-wide campaign to secure more careful handling of freight trains, and control of wagon speeds in yard and hump shunting.

As longer-range measures Mr. Mitchell suggested the redesign of journals and bearings to reduce unit bearing pressures to the lowest limit possible, even if this should entail using 6 in. × 11 in. in place of 5½ in. × 10 in. journals. A stop should be put to the practice of fitting standard brasses to journals worn down as much as ⅜ in. in dia., which puts bearing pressures up to dangerous limits; and worn journals could have sleeves applied to restore their normal diameter. Axles and axleboxes, he suggests, should be redesigned without collars on journals, which are a frequent source of trouble. Equally, underframes and draught gears of wagons should be redesigned to minimise the effects on journal boxes of impacts between wagons. Among other recommendations was a plea for research in lubricating oils and packing waste, so that the minimum quantity of the best may be used, rather than the maximum of what is merely passable.

Progressive System of Locomotive Repairs

PROGRESS and planning have played an important part in reducing the number of days locomotives are under repairs in railway workshops. Among the advantages to be obtained by the introduction of such a system are: a shorter repair period, thus effecting a reduction in capital expenditure because of greater availability for traffic of motive power units; a decrease in stores balances, with consequent lower interest charges; improved methods of production by the use of jigs and fixtures; and avoidance of constant breaking down of machines by repairing, in economic quantities, locomotive components received in main workshops from the running depots for repairs.

Various systems of progress and planning have been introduced in locomotive repair shops in this country and overseas, and each administration has its own methods, depending to a considerable extent on the type of staff available. The methods adopted are basically the same, and have to a greater or lesser degree achieved their objective. Forward planning is of major importance so far as locomotive boiler repairs are concerned, if spare boilers are to be kept within reasonable limits; an objective of major importance, since this would reduce to some extent the amount of capital lying idle. Similar remarks apply to locomotive components; one of the objects of progress and planning is to obtain a shorter locomotive repair period, while at the same time reducing the amount of stock carried; if excess stock is held and cannibalisation is resorted to, to obtain a quicker repair, obviously progress and planning has failed to achieve its object. Further information on this subject is given elsewhere in this issue, in an article relating to Swindon Works, Western Region, which is being visited today, Friday, by the President and Members of the Institution of Locomotive Engineers.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Locomotive Liveries

April 27

SIR,—I cannot think I am in the minority in feeling considerable disappointment in the new liveries for locomotives. In the first place British Railways gave us to understand that all passenger engines would be blue or green, whereas the majority are now to be dull lined black.

Both the blue and green liveries are much too dark, as after a few weeks running one hardly notices that they have been coloured at all. If the blue were to be made several shades lighter it would be a great improvement, but the drab "new green" compares unfavourably with the old L.N.E.R. green, which in my opinion is the most attractive colour of all where locomotives are concerned. Can some improvement be made in this direction?

Yours faithfully,

C. V. DALTON

Thurgarton, Notts

Electro-Pneumatic Brakes

May 1

SIR,—With reference to Mr. Fowler's letter, under the above heading in your issue of April 28, in which the writer questions one aspect of Mr. Broadbent's paper before the Institution of Electrical Engineers, I feel that your correspondent has overlooked certain vital considerations—despite his very interesting calculations.

Retardation control is designed to limit braking to the maximum rate compatible with the available adhesion. If we accept the figure of 3·3 m.p.h./sec. as the maximum retardation rate on level track, it is quickly apparent that with equal brake cylinder pressure a lower rate would be achieved on a falling gradient, or, alternatively, that with greater brake cylinder pressure risk of the wheels "picking up" would be introduced. Thus, in answer to Mr. Fowler's suggestion that it would appear to be undesirable that braking when descending gradients should be reduced by premature operation of the blow down valves, I would emphasise that, given adhesion conditions, a reduced rate of retardation must in fact be aimed at. The converse, of course, applies to rising gradients, where the weight of the train acts in conjunction with all frictional forces to enable a higher rate of retardation to be achieved.

The question seems to be whether the actual rates of 2·7 m.p.h./sec. and 3·9 m.p.h./sec. on down and up gradients respectively of 1 in 40 are, in fact, the maximum ones, accepting the maximum of 3·3 m.p.h./sec. for level track.

Yours faithfully,

C. McK. CRAY

35, West Lodge Avenue, W.3

May 1

SIR,—This reply to the letter from Mr. Fowler in your issue of April 28 anticipates the answer to be given to a question asked at the Electric Railway Traction Convention.

Briefly, it would be most undesirable to attempt to achieve the same rate of braking on a down gradient as that on the level. Equal braking on the level and on a down gradient is possible only with underbraking on the level.

If P is the force producing a certain rate of braking on the level, a force (P + W sin α) would be required to attain the same rate on a down gradient. (W = train weight and α = angle of slope). If the application of P resulted in maximum braking on the level, it must have been achieved by the maximum use of the adhesive weight. The imposition of a force (P + W sin α) by means of practically the same adhesive weight, would with certainty result in wheel pick-up and skid.

Compensation on a down gradient resulting in a reduction which, as shown above, is essential, is achieved almost exactly with the retarder. For instance, on a 2° (1 in 29) slope the maximum braking rate on the level should be reduced by g sin 2° ft./sec.^{2} *i.e.*, by ·0349g. ft./sec.^{2} if wheel pick-up is to be avoided. Retardation control lowers the rate on a train with cast iron blocks by g (tan 8½° − tan 6½°) *i.e.* by ·0355 g.ft./sec.^{2}

The effect of a down gradient on a train with and without retardation control may be noted. The necessary reduction in braking from a speed of 50 m.p.h. with a train loaded to 20 per cent. above tare will, on a 2° slope and with retardation control, result in a fall in braking efficiency of approximately 23 per cent. The braking efficiency of the same train under the same conditions, but without retardation control, would drop by 46 per cent.

Yours faithfully,

H. R. BROADBENT

London Transport Executive, Acton Works, W.3

Revision of Regional Boundaries

April 27

SIR,—Mr. George Dow's reply to your correspondent, published in your issue of April 21, reveals an almost staggering parochialism. Of course the North London lines are an integral part of the London Midland Region, but both the London Midland Region and the London Transport Executive are part of the British Transport Commission, whose prime reason for existence is to integrate the various transport facilities in this country. The North London line, given suitable publicity and facilities, could be invaluable in relieving congestion on the Underground system, but only as part of London Transport and not the London Midland Region, for the connections at Willesden for Birmingham and Carlisle can hardly be the North London's most important function.

If proper co-ordination is to be achieved, the new regional arrangements, under which lines in one region are sometimes operated by another region, must be extended to London, so that all public relations in connection with local passenger traffic in the London area come under the ægis of the London Transport Executive, even if the operation of some lines remains with the Regions.

Yours faithfully,

D. H. MILES

36, Oakleigh Avenue, London, N.20

Wagon Turn-Round

March 17

SIR,—There have been many arguments about high-capacity wagons and wagon turn-round, and I have watched the correspondence with keen interest over the past five years, in fact I myself have entered the lists in favour of large-capacity wagons with continuous brakes and automatic couplings.

Basically, Mr. E. R. B. Roberts is absolutely right in his letters advocating the use of modern methods. Those who oppose him have narrow views and do not consider the national viewpoint. Perhaps I am wrong in that statement. Maybe the national viewpoint is narrow! We have grown up over a century or so with our little toy "trucks" and their three-link couplings, and, naturally, the equipment to handle such things. We have not counted the cost in wasted man-hours. What was good enough for grandfather is good enough for us! (This idea is more or less universal over the country). We won't change; things that are done in other countries can't be done here—the conditions aren't the same! In any case our ideas are best.

Apparently those are the thoughts of the average Englishman, especially of those who have not lived and worked abroad. He will not adopt the ideas of others

because he didn't think of them and they are therefore suspect. Eventually he is forced to adopt the practice of others. For instance, flat-bottom rails are now standard here, after twenty years of our own experiments, when we could have obtained the information and experience we wanted from other countries. They need over sixteen thousand fewer fastenings per mile, I believe—and are much stronger than bullhead rails too! We have automatic couplers on a few units of coaching stock. Within another twenty years or so we must have large capacity wagons and continuous brakes and automatic couplings for all freight stock if transport is to be more economical, safer, faster and more efficient. We could have these things in less than five years if we weren't so pig-headed!

Yours faithfully,

G. RICHARD PARKES

90, Serpentine Road, Wallasey

Commercial Train Services

April 25

SIR,—Under this heading you recently dealt with the service between London and Leeds. You merely mentioned Bradford, yet Bradford has a claim as great as, if not greater than, Leeds to a fast and adequate service to London and the West and Midlands.

I suggest that you look at the bank returns which will give you an idea of the volume of trade passing through Bradford, which leaves Leeds far behind, yet we have a miserable train service to Bradford.

The L.M.S.R. used to run the "Yorkshireman" from Bradford to St. Pancras in 4¼ hr. It was a good train and gave four hours in London. It returned from St. Pancras at 5 p.m. and was due Bradford 9.15 p.m. There is nothing like it today. The 4.50 with much luck gets in at 10.55 p.m. It was once considered very slow when it arrived at 10 p.m. and the 6 p.m. from St. Pancras got in at 11 p.m.

The trains are slow enough to Sheffield, but after that the times are bad. The "South Yorkshireman," 10 a.m. from Bradford Exchange, is due at Sheffield at 11.20—80 min. for 39¼ miles; down it is worse—94 minutes. Before the war the 10 a.m. down from Marylebone was in Bradford at 2.56.

There is much in the Press about cheap bookings. Look up the train services and you go by bus; it is often cheaper and quicker. This is so into Wharfedale, and the Eastern Region has nearly washed out the Bradford—Harrogate service; there is a bus every half-hour at about half the rail fare. This service could have been used to develop a through service from Bradford to York and the North, *via* Harrogate.

Between Leeds City and Bradford *via* Shipley the service is very poor. Between 12.12 p.m. (very slow) and 2.40 p.m. there is no train, then 3, and 4.34 p.m. Later the service is worse. There is a bus service every fifteen minutes between Leeds and Bradford, almost between the two stations, time 30 minutes, fare eightpence.

A friend who has a large mill near a station has to bring in operatives from many miles, on a direct railway route. He was telling me the cost of coach hire for this purpose. I suggested that the railway could give better service. The hoot of derision which he gave had to be heard to be believed.

Is there justification for the nine days required to bring goods from Hawick way to Bradford? It is cheaper, quicker and more reliable to send a lorry to Scotland to deliver and collect goods. The same applies to the North East coast. Another friend is moving his plant to this area and will send his lorry through to Bradford and Huddersfield and give better service than the railways. This need not be.

I understand that a fast fitted goods leaves Bradford Valley every evening and is due in London in the very early morning. If so, what effort has the goods commercial branch made to make known this service and any other similar service available? Why doesn't its collecting staff advertise these facilities? I told my packer, whose reply was that the railways could have the trade if they would collect it. He then had goods waiting into the third day for collection, less than a quarter-of-a-mile from the goods yard.

The passenger service to the West of England is now only a shadow of itself. There seems a purpose to blot out the old Midland route; the services deteriorate and become more difficult. Services north of Bradford are worse and I commend as a study the services running into and out of Bradford from Leeds, Skipton, Manchester or Huddersfield.

The services to the Lake District, which is exceedingly popular here, are fantastically impossible. There is no direct through train to either Keswick or Windermere, though a service *via* Appleby would be easy to Keswick and beyond. The Bradford-Morecambe service, except for one train each way, is bad and slow.

Newspaper publicity is nearly as feeble. A good space is taken weekly to advertise the different excursions, but the times are usually given from Bradford only. Those living near any of the suburban stations have to either get another more local paper or go to the local station for details. A little foresight to include such stations as Guiseley, Bingley, Shipley, Laisterdyke, Dudley Hill, and Wyke would be advantageous.

The railways are losing £50,000,000 a year. They deserve to. My whole leaning is to the railway rather than road, for both goods and passenger services. The trouble is not at District level, but higher up.

Yours faithfully,

WILLIAM BOTTOMLEY

27, Ferncliffe Drive, Baildon

Limitation of Railway Speeds

April 19

SIR,—Surely Mr. Jacobson makes a false assumption in his letter in your April 7 issue when he says that no one recognises the new relation between road and rail transport. He ably describes what is really implied by those hopelessly overworked words in the vocabulary of transport—co-ordination and integration. He concedes that the limit of train speed is twice that of road traffic and because of this insists that railways must give better service, and yet proposes a working speed only 10 m.p.h. above that of road vehicles. Why not speeds of 80 or 90 m.p.h. or even higher?

I do not quarrel with the need for improved terminal facilities, but the thought of rooms instead of compartments or saloon stock seems to be in complete defiance of the economic axiom to spread the costs over the maximum number of units. Already the increased vehicle weight per passenger seat has reduced the benefit to be derived from improved locomotive efficiency, and to advance along this line will lead to ruin. The eight more or less conventional vehicles formed in the pre-war "Coronation" seated 216 passengers with an average weight of 1·3 tons per seat, but the observation vehicle which was marshalled at the rear weighed 33¾ tons and seated 14 passengers—an average of no less than 2·4 tons per passenger seat.

Is it seriously proposed that we double the weights of trains to convey a volume of traffic that will not support the cost of operation at existing train weights? To do so would only make further and unnecessary demands on the power units and at the same time spread the additional cost on the same and already wavering user. Should this happen the elasticity of demand will result in not the road vehicle claiming the traffic but the aeroplane, which is rapidly providing state room comfort at speeds far beyond those that even I think the railway can reach.

Something drastic will have to be done, but heavier, slower trains will certainly not solve the problem any more than will a purchase tax on commercial road vehicles and an increase of 9d. a gal. for fuel.

Yours faithfully,

GEO. F. THOMLINSON

36, Stockens Green, Knebworth

THE SCRAP HEAP

Light Relief

In Brindisi, Donato Suma stopped a train to ask the driver for a light. On April 27 he appeared in court, but was released, there being no Italian law under which he could be sentenced.—*From the "News Chronicle."*

Tempus Fugit

Trains travelling the 40-mile journey between Baltimore and Washington are arriving in Washington before they leave Baltimore. This supersonic feat is possible because Washington does not go on to "summer time." The 10 p.m. from Baltimore gets in at 9.55 p.m.—*From the "Daily Mail."*

Buckingham-Bletchley Centenary

The centenary of the opening of the Buckingham and Bletchley line, which occurred on May 1, 1950, recalls the long struggle between engineers as to whether 7 ft. broad-gauge track favoured by G.W.R. interests, or the 4 ft. 8½ in. standard-gauge adopted by the L.N.W.R. should be used. The rivalry between these two interests became acute in Buckinghamshire because the proposed railway would give access to the territories of both the G.W.R. and the L.N.W.R.

Promoters of railways in the Bletchley, Buckingham, Banbury, and Oxford area first formed two companies, both of which were incorporated in 1846, though, realising their interests would best be served by amalgamation, a fresh company was formed and called the Buckinghamshire Railway Company. Application was made to build three lines, from Banbury to Tring, Oxford to Bletchley, and to continue the line from Cheddington to Aylesbury back to Harrow to rejoin the L.N.W.R. At a board meeting on August 29, 1846, Sir Harry Verney, Chairman, decided to proceed only with the Oxford and Banbury lines.

Local support for the lines was strong, but the Great Western was bitterly opposed to the narrow gauge infiltration, and only the Oxford-Bletchley line and the Brackley-Winslow (Verney Junction) section were authorised, though the extension from Brackley to Banbury was authorised later in 1847. The L.N.W.R. subscribed £45,000 of the extra capital required, and guaranteed Buckinghamshire Railway shares.

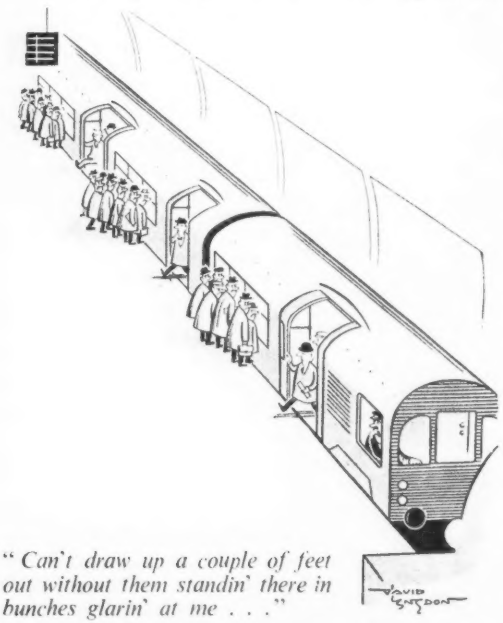
By March, 1850, the line was nearly complete from Bletchley to Banbury, and from Verney Junction to Oxford work was proceeding fast. At the end of April all was ready for the opening of the Bletchley to Banbury line, and on May 1 the official opening ceremony was performed and trains covered with flags and bunting carried local celebrities along the line to open each station in turn.

Weighed—Found Wanting

This is the first shaggy weighing machine story I have come across. A passenger waiting at Crewe decided to weigh himself. He stood on the scales, put his penny in, and a voice from the machine said: "You weigh 12 stone and you are going to catch the 3.20 to Preston." Impressed by this accurate forecast, the man asked a porter about the machine. "It tells your future as well as your weight," the porter explained. "It has an electronic brain."

The traveller borrowed the porter's cap and tunic, and stood on the scales again, but the machine was not deceived. It told him: "You weigh 12 stone and you are going to catch the 3.20 to Preston."

Undaunted, the traveller swathed himself in some potato sacks which he found lying on the platform, and stood on the scales once more. This time the voice said: "You still weigh 12 stone, but while you've been mucking about you've missed the 3.20 to Preston."—*Northerner II in "The Yorkshire Post."*



"Can't draw up a couple of feet out without them standin' there in bunches glarin' at me . . ."

[Reproduced by permission of the proprietors of "Punch"

Not British

While a bus was standing at a stopping point between Fort Rosebery and Kasama the African driver, having set down all the passengers, was smoking a cigarette when, hearing a scuffling in the passenger section, he turned to see a lion there. He started up in alarm and drove off at record speed, and, though the lion jumped off as the bus rounded a sharp bend, the driver did not stop till he had covered six miles. It appeared that passengers in the bus had been carying meat.—*From "The Times."*

Narrow-Gauge Adventure

The longest narrow-gauge railway in the British Isles is now preparing for its busy season. This is the Isle of Man Railway, which each summer carries holidaymakers to the Manx beauty spots. Its three-foot-wide line covers 46¾ miles of hilly country, and over a million passengers and 50,000 tons of freight are carried each year, in an island where the population is only 50,000.

Even this small railway has its adventures. Early in 1942, the steamer from England was prevented by rough seas from going into Douglas harbour, and had to go round the island to the more sheltered harbour at Peel. The Douglas-Peel line was blocked by snow, but a special train consisting of three coaches with two engines at each end was sent out from Douglas.

By continually charging the snowdrifts it battered its way through to Peel, and brought the steamer passengers safely back to Douglas. One of the four engines used was No. 5 *Mona*, supplied in 1874!—*From an article by Elaine Newell in "The Liverpool Echo."*

Recording Angel

(To our local station announcer)

Lady, in your bower apart,
Take the thanks of one fond heart,
As you "disc-jockey" for us,
Little "Miss Anonymous,"
Do you realise, I wonder,
The indebtedness we're under,
As you deftly mix your strains
With announcements about trains?

As we straggle on each morn,
Drooping, desolate, forlorn,
To our daily immolation
On the altar of the nation,
We're restored to life again
By a Sullivan refrain;
We pass on, with quickened breath,
And defer our date with death.

When we've been out on the "razz"
'T'would be kind to keep off jazz
And I will admit I'd sooner
Meet the "Lily of Laguna,"
When I leave my comfy train,
Than that sugar-puss Marlene;
I shall not be in the queue
At her lamp-post rendezvous.

I admit that I enthuse a
Lot about the works of Sousa,
Yet he doesn't suit my mood
When my business cares intrude.
At such times I even grouse
At Rossini, Wagner, Strauss,
But I'll never, never weep
When you play "Sing me to Sleep!"

A. B.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Prospect Marshalling Yard

The new marshalling yard at Prospect will be the first fully mechanised yard in the Union and will be able to handle the equivalent of 3,000 four-wheel wagons a day. Good progress is being made with the laying out of the yard and it will soon be operating as one of the most important clearing centres for railway traffic on the Witwatersrand. The yard is adjacent to the Prospect goods yard and is directly linked at each end with the Rand Mineral Line which in turn connects with the main line at Germiston and Langlaagte.

The important feature is the introduction of mechanisation for the operation of points and crossings and the regulation of the speed of wagons as they leave the hump. An earlier type of hump yard built at Gunhill, Orange Free State, was not mechanised, and shunters had to be employed to operate the switches, and a brakeman had to accompany each truck. It was found that the large number of additional staff required did not justify the use of such methods as compared with the conventional method of flat shunting.

At Prospect the mechanisation of operations will allow trains to be shunted at much greater speed. Only two men will be necessary to control the mechanically-operated points and crossings and retarders. The yard, which will eventually cost about £600,000, will have nearly 30 miles of track and 184 sets of points and crossings. There will be three distinct groups of sidings where trains carrying all classes of mixed goods traffic to and from the Johannesburg area will be handled.

All incoming trains will first enter the reception yard which contains fifteen tracks. From there the wagons will be shunted over the hump to the classification yard comprising 32 tracks. Thereafter, as made-up trains they will proceed to one or another of the eight departure roads according to their destination.

Non-European Traffic

Because of the growth of non-European passenger traffic during the past decade the railways have faced a difficult problem. This traffic has steadily increased due to the rapid development of commerce and industry, situated for the most part in the larger urban areas, and because of the needs of the mining industry whose labour is mainly recruited from the native reserves and from territories over the Union borders.

The transport needs of the non-European have always been taken into account in railway planning, but expansion has been so rapid that it has not been possible to keep pace with the needs of rolling stock, and, consequently, the frequency of trains. The African, who accounts for most third class traffic, and a small portion of first and second class traffic, is numerically the largest customer of the railways. Besides train services run exclusively for Africans, there are many road motor services catering solely for them. Third class journeys amounted to 59,296,613 in 1940-41 for the whole of the Union and had risen to 133,028,697 in the year 1948-49. Suburban traffic of all classes in 1948-49 totalled 224,614,773 passengers, compared with 101,119,774 ten years earlier.

In suburban areas first and second class accommodation is also provided for non-Europeans. In the first quarter of 1937-38 the Reef and Pretoria suburban services carried 3,958,686 third class passengers. Ten years later the total for the corresponding quarter had risen to 15,593,414 journeys.

On long-distance journeys refreshments are served on all trains with non-European accommodation, and dining cars are attached to trains operating between the Eastern Province and the Rand, Sterkstroom, and De Aar, and from the Rand to Rhodesia and Mozambique, which are run for this class of traffic exclusively.

CEYLON

Locomotives and Rolling Stock Orders

Orders have been placed for 25 main-line diesel-electric locomotives, 130 coaches and more than 250 wagons. The locomotives will weigh about 80 tons and have a tractive effort of 30,000 lb. They will be capable of working in pairs, under the control of one driver. As they will need only one supply of fuel and water every 750 miles, a great saving in operating costs is expected. Representatives of the successful tenderers are on a tour of inspection of the system to acquaint themselves with local conditions.

The coaches are of a new design and will be almost 15 ft. longer than existing types. The wheels will be smaller and the wheelbase longer. The coaches will be upholstered in plastic leather cloth and will have fluorescent lighting. External panelling will be steel and interior, plastics.

The wagons will be fitted with the new standard wheels, and thief-proof vacuum locks.

WESTERN GERMANY

Mosel Bridge Rebuilt

The double-track bridge over the River Mosel at Güls has now been built or rebuilt three times by the Gutehoffnungshütte steelworks at Oberhausen. The bridge was erected by this firm in 1876-79. It then consisted of three main iron spans each 206 ft. 8 in. long, and two arched lateral spans of 57 ft. 5 in. This bridge lasted till 1927, when increasing traffic and heavier standard loads made the construction of a new bridge necessary, which was built in steel but otherwise more or less to the same design. As traffic could not be interrupted for long periods, the new steel arches were assembled on falsework parallel to the old bridge on the upstream side. On each of three successive weekend possessions, one of the three arches was moved sideways into position, whilst the old iron arch was moved to the downstream side and dismantled.

In 1945, the bridge was heavily damaged in an air raid and one of the arches was completely destroyed. A temporary single-track structure, erected by French engineers, soon proved inadequate, and the Gutehoffnungshütte firm was again called on to rebuild the bridge. Fortunately, the drawings were still available, so that the reconstruction could be carried out to the 1927 design. As it was again essential not to interrupt the traffic for a long period, the new arch was assembled underneath the emergency bridge, and during a 47-hr. weekend possession it was lifted and the emergency bridge dismantled.

Munich Underground

A project to resume the building of the underground railway at Munich begun in 1939 is at present being evolved. The original scheme is to be expanded by including a line to pass under the River Isar. Work on the first underground line was stopped when war began and subsequently the site where the building had begun collapsed after having been hit by a bomb.

Additional Amenities on Expresses

Additional amenities to be introduced shortly on fast and semi-fast trains will include automatic machines selling paper towels and soaps. The price of a towel and a soap will be 10 pfennig (about 2d.). Typewriter compartments are to be introduced on some long-distance fast trains and railcars between Hamburg and Cologne, and Frankfurt-on-Main, as from May 15.

Reconstruction of Lines

On April 1 the whole of the line between Düren, on the main line halfway between Aachen and Cologne, and Dalheim, on the Dutch frontier, west of München-Gladbach, was restored to traffic. The last link restored was the Jüllich-Linnich-Baal section connecting the 9½-mile Düren-Jüllich section in the south with the 11-mile Baal-Dalheim section in the north.

SPAIN

Summer Services

The summer service which operates as from May 14 includes a new express thrice-weekly between Madrid and Cartagena. It leaves Madrid at 9.30 a.m., reaching Cartagena (328 miles) at 9.50 p.m. There is a new railcar service from Valencia to Alicante, Murcia, and Granada, leaving Valencia at 9 a.m. and reaching Granada at 10 p.m.

Novel Axleboxes for Express Locomotives

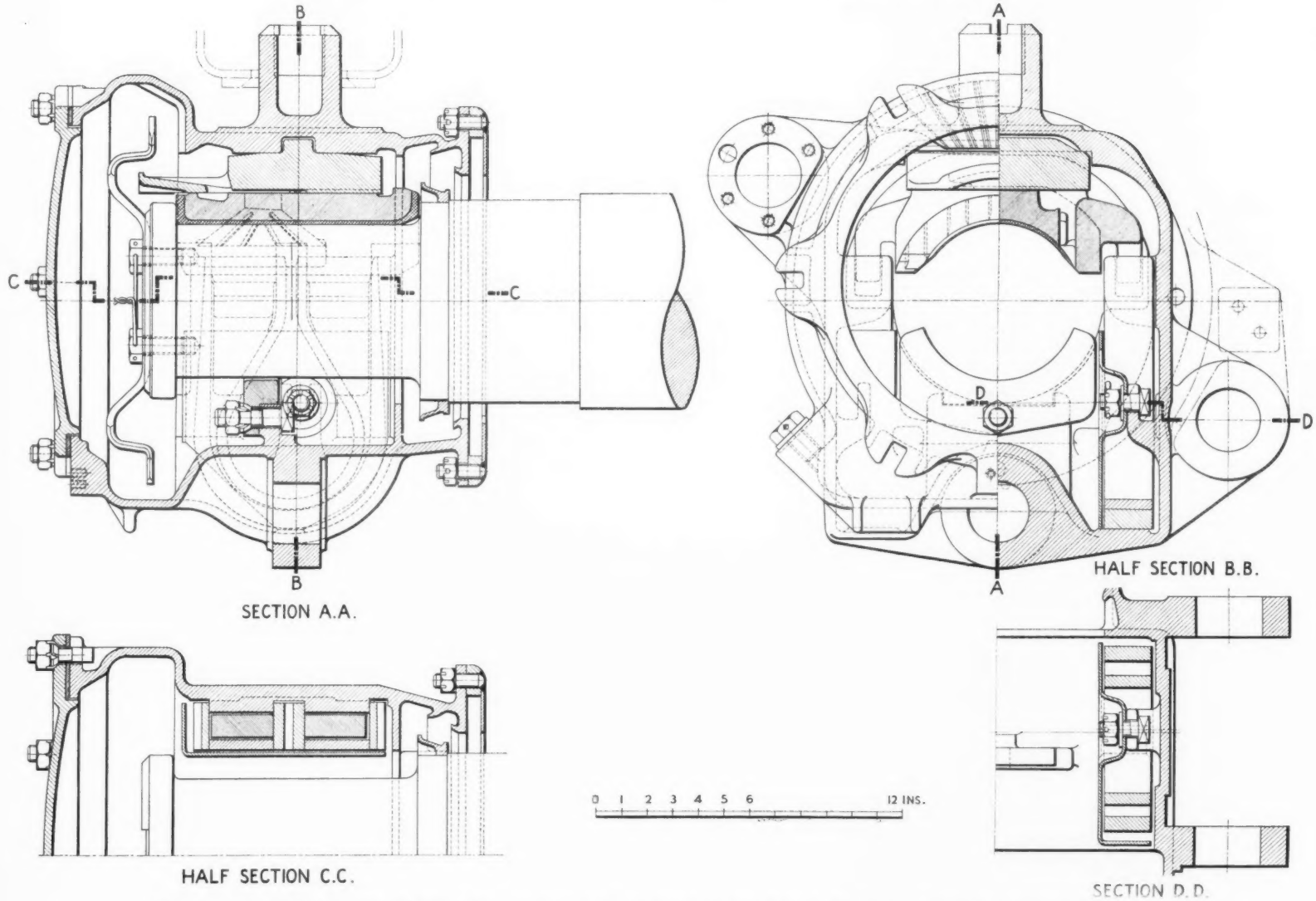
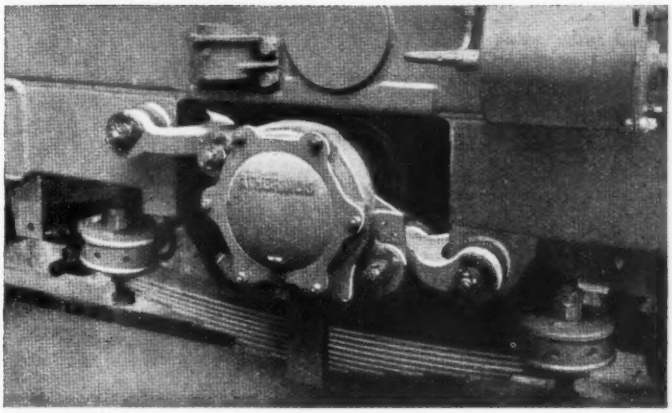


Fig. 1—Sectional drawings of the Athermos type axlebox fitted to the French Railways electric locomotive, No. 7001

Novel Axleboxes for Express Locomotives

A new approach to the problem of improving bogie stability at high speeds

By F. Clear Harrison, M.I.Mech.E.



Athermos axlebox fitted to an electric locomotive, showing the forked link connection between bogie frame and axlebox

HIGH speeds, often exceeding 100 m.p.h., attained by modern locomotives, give rise to problems of bogie instability.

Much thought has been applied to the design of the bogie in an endeavour to solve these problems, but it is only recently that it has been realised that modifications to conventional axlebox practice can have an important effect in improving the flexibility of suspension and so reducing the reactions between the rail and the locomotive, particularly when running at speed on poorly-laid tracks or on severe curves.

French Application

Axleboxes specifically designed to assist in overcoming the problem of stability at high speeds and which have proved successful in service are fitted to the C.C. electric locomotive No. 7001 of the French National Railways which was built by the Société Alsthom of Paris

The general features of this locomotive were described in *The Railway Gazette* issue of June 10, 1949. It will be recalled that it made new speed records for locomotives of this category in May, 1949, hauling a passenger train from Paris to Bordeaux at an average speed of 85 m.p.h. (136 km.p.h.) and exceeding at some points on the journey 113 m.p.h. (180 km.p.h.).

The axleboxes are of the Athermos mechanically-lubricated type and were manufactured under the Isothermos patents.

From Fig. 1 it will be seen that all the accepted components of an Isothermos axlebox are incorporated, namely:—

A. A bearing ensuring copious fluid film lubrication over the whole journal.

B. An oil flinger conveying a large volume of oil to the bush.

C. An oil sealing ring shrunk on to the axle, free of any frictional contact and thus not susceptible to wear, which rotates in an oil recuperating chamber.

D. A safety pad which effectively protects the oil flinger from damage in the event of violent buffing shocks or derailment.

Reduced Maintenance

The French railways have a wide experience of Isothermos axleboxes embodying these features, and state that they can be run for distances in excess of 150,000 miles without replenishment of oil or any other attention.

The special features peculiar to this new axlebox are:—

E. A novel guiding system consisting of forked links mounted in Silentblocs which permit the axlebox to move vertically without fore and aft deviation. This system has proved far more flexible than the conventional axlebox guides and hornplates and is exceedingly smooth in operation since no guides are necessary with initial clearances, and the shock and wear resulting from the battering of metal to metal faces is eliminated.

Controlled Lateral Play

F. A novel device allowing a controlled lateral play of 20 m.m. which has a marked effect in easing the running on sharp curves.

This device consists of strong springs inserted inside the axlebox body between the bearing and the steel casing which exercises a smooth and elastic resistance to the movement of the bearing and eliminate the violent shocks, and consequent wear, which arise from the end play between bearing and journal demanded by conventional axlebox construction.

Non-motored guiding axles having

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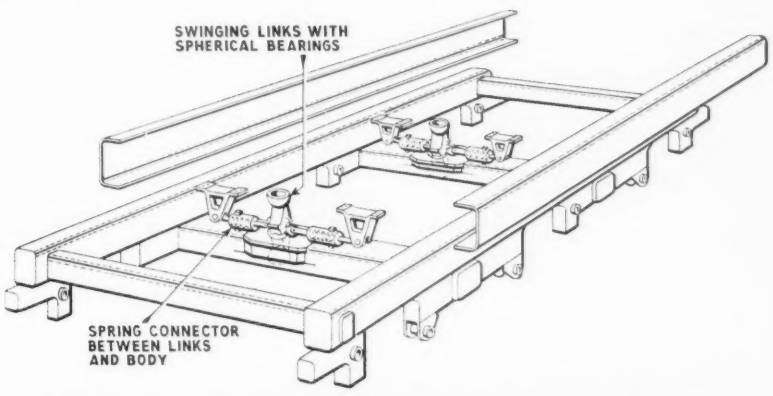


Fig. 2—Arrangement of swing links and restoring springs fitted to the Co-Co bogies

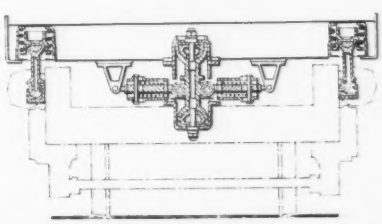


Fig. 3—End view of the bogie central equipment showing the links attached to the locomotive frame

Locomotive Repairs at Swindon Works, Western Region

A progressive system to ensure a minimum overhaul period

IT has been recognised for a considerable time that a progressive system which controls the movement and inspection of materials necessary for repairs to locomotives during periodic overhaul in railway workshops, is one of the most important elements of railway organisation. These systems have been installed in the principal locomotive repair shops, both at home and overseas, and while each railway has its own individual methods, they are basically the same.

In the absence of such a system, repairs to locomotives cannot be carried out efficiently, nor can the total number of days a locomotive is under repairs in the workshops be controlled, a feature of considerable importance, as the percentage of locomotives under repairs in shops is one of the major factors to be taken into consideration, affecting as it does the total number of locomotives actually available for traffic working. Obviously, it is to the advantage of the railways to reduce repair days to a minimum.

Progress and Planning

Among the advantages to be gained from progress and planning are a quicker repair period, thus reducing capital expenditure by fewer replacement of, or the purchase of additional locomotives; decrease in stores balances, thus reducing interest charges; improved production methods by the use of jigs and fixtures, and avoiding the constant breaking down of machines by repairing in economic quantities locomotive components received in major workshops from the running depots for repairs.

It is also possible by forward planning to forecast with a reasonable degree of accuracy a programme of workshops repairs embracing a three-year to five-year period. As an instance, assuming there are 48 engines of a class attaining their stipulated mileage in four years, they would be programmed for periodic repair at the rate of one a month. Such a scheme would be of considerable assistance to the stores department, a department of importance in any forward planning scheme. In the case cited this department would hold stock for that particular class of locomotive sufficient for an output of one engine a month.

Forward planning can greatly assist the operating departments, as they would be aware well in advance what locomotives they would withdraw from traffic for workshop repair; by the same arrangement they would also know what locomotives they would receive from workshops after periodic overhaul.

Of considerable importance in the reduction of locomotive repair time is a card index on which are recorded dimensions of major components requiring to be replaced during the next repair period, which by virtue of the amount of work involved cannot be manufactured in the allotted engine repair period. Manufacture can be commenced well in advance to insure such components to be at least in a semi-finished condition before the engine is received in the shops.

Forward planning is necessary so far as the locomotive boiler repairs are concerned, as in cases where boilers require heavy repairs, this period exceeds the mechanical repair period, and spare boilers are put in hand in sufficient time for the boiler repairs to be completed before the locomotive for which it is required is received in shops.

Organisation at Swindon Works

Western Region locomotives are sent to Swindon or to one of the smaller repair depots of the Mechanical & Electrical Engineer's Departments for heavy repairs at intervals of from 16 months to five years, depending on the class of engine. When sent to Swindon the engine passes through a standard procedure, the course of repair being controlled by the Locomotive Progress Organisation, operating under the supervision of the Assistant (Locomotive) to the Works Manager.

This staff consists of a Chief Progress Inspector and 20 inspectors, of whom 17 are concerned wholly with repairs; of these, ten are engaged on the shop floor for initial inspection and progressing of the repair of detail components. On arrival, the locomotive is sent to the cleaning-out shop, where the engine and tender are uncoupled, and coal, ashes, firebars, firehole shield and smokeplate are removed. The locomotive is then given a general initial examination by a progress inspector.

Internal Distribution of Locomotives

From the pool in the cleaning shop, engines are provided to meet the intake required in each erecting shop, and the cleaned engines are placed outside the day before they are required. At the same time, particulars of the engine and details of the allocated boilers, where a boiler change is involved, are circulated to all shops from the progress office in the form of a daily advice.

There are two repair shops. These are the "A" erecting shop, which deals with all the larger locomotives, and the "B" erecting shop dealing with the smaller engines, mainly of the 0-6-0 shunting type. Both shops are of the transverse pit design and are fed by traversing tables, which bring engines into the shop from outside. "A" shop is divided into two sections, the first of which, A.1, houses cleaning bosh, bogie and pony track repair section, boiler plastering and cleading section, and a repair circuit which can deal with two heavy and four light repairs a week.

The class of engine dealt with in this circuit is restricted by the capacity of the cranes which are limited to 50 tons. The second section, A.2., houses the main heavy repair circuit, which deals with ten engines a week; also, a new work section having a capacity of two new engines a week, and a light repair section which can deal with three light repairs a week, generally of a design too heavy to be dealt with in A.1 shop. The cranes in this section have a lifting capacity of 100 tons and are of sufficient height to lift any engine over the others.

The heavy repairs go through stripping, frame rectification, and two assembly stages, being run on to the first stage position from the traverser; lifted by crane to stages 2 and 3, and run on to stage 4 on their own wheels. "B" erecting shop has shorter pits and smaller capacity traversing tables and cranes of only 20 tons capacity; it is, therefore, only suitable for carrying out the smaller design of engine and tender repairs.

Repair Time Schedules

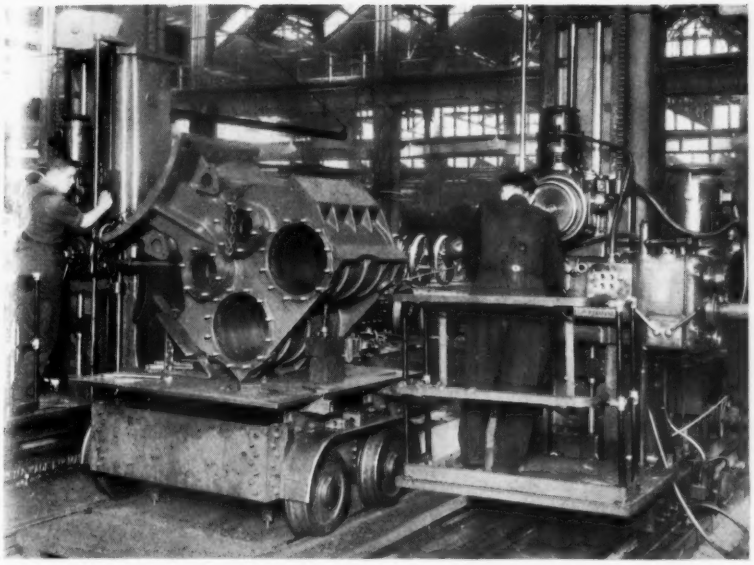
On both the heavy repair circuits in "A" shop, standard repair time schedules are worked to on the stripping and assembly stages, individual time schedules being applied to frame rectification. The times are, stripping and cleaning three days; rectification, varying, but averages five days, first stage assembly five days, and final assembly four days, giving an average of 17 working days for complete repair. The painting of the locomotive is carried out during assembly stages. Two further days are occupied in weight adjustment on the engine weigh table, trial, and any after-trial attention required, then locomotives are handed back to the Motive Power Department at Swindon shed.

During the stripping stages all items are stripped and examined by a progress inspector and painted according to a colour code which indicates the repair necessary. The components are immediately dispatched to its appropriate repair shop. The actual instructions follow the material as soon as the inspector's report is completed. This report includes the forecast date on which the particular component is required back to the erecting shop for final assembly. On completion the combined order and route slips are returned to the Progress Office on completion of repairs. Light repairs are dealt with in the same way and the material supply and trial dates are decided on the basis of the initial inspector's report.

Distribution of Progress Inspectors

The nine progress inspectors stationed on the floor of the erecting shop carry out the following individual duties:—

Two on the stripping section are res-



Duplex drilling on Kitchen & Wade horizontal drilling machines ; locomotive frames are also drilled on each side simultaneously

ponsible for the initial examination of the various locomotive parts, except those parts which have to be boshed, and for the sizing of cylinders, steam chest parts, pistons, and valves.

One inspector is employed on frame rectification and is responsible for the amount of work done to each frame and for giving the schedule time for the work in order that the final date for completion of the repair can be decided as soon as the engine is received in the section.

Two inspectors are employed on gears and bogies, valves, reversing and brake gear, motion bars, and all boshed components, bogie, pony and radial trucks.

Two are on sizes for the machining of axleboxes and coupling and connecting rods. These inspectors also cover this work for "A" and "B" shops, and also work sent in from running depots, while a further two are employed on coppersmiths and boilermakers work, pipework, ashpans, splashers, smokeboxes and footplating, but not the actual boiler.

Boiler Repairs

In addition to the inspectors attached to the Progress Office, wheel and boiler examinations are carried out by shop inspectors who are stationed in those shops.

All boilers are changed on locomotives requiring heavy repairs, providing the repair to the boiler includes, at least, a complete set of new tubes; boilers requiring no more than a set of tubes and a few stays are dealt with in the erecting shop on a light boiler repair plant. Where boilers require a heavier repair these are transferred to the boiler shops. Those boilers repaired on the light repair plant are scheduled to be available for the replacement of plaster and cleading in ten days, or, should the copper tube plate require welding, 12 days.

Engines for which no boilers are available from the light repair plant are allotted boilers from the spare stock maintained by the output from the main boiler repair shops. These boilers are sent to the boiler plastering section on the same day as the engines to which they have been allocated enter the stripping section. The engine frames and boilers are scheduled to meet on the seventh day; thus, the boiler has six days in which to be prepared, and during this period it is checked on a jig for smokebox bolt holes and boiler carrying brackets, after which cleading is carried out.

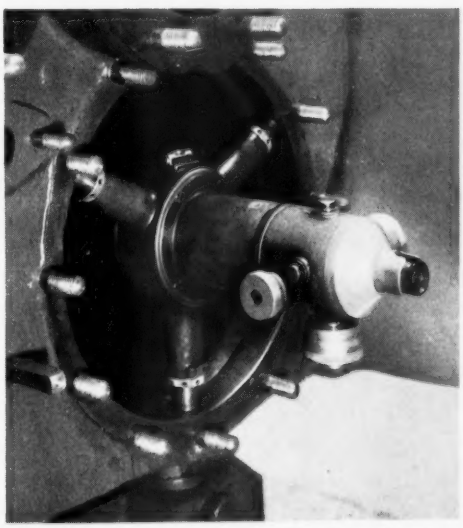
Wheel Repairs

Wheels, after examination, are scheduled to arrive in the erecting shop on the seventh day of the repair, in the event of the repair to the wheels removed from the locomotive being too heavy to permit of this, spare wheels are drawn from stock. In the "B" erecting shop, engines are not moved from one pit to another during the repair period. The modern type of 0-6-0 tank shunting engines are scheduled to be repaired in 15 working days, and the older engines according to their frame condition. Boilers for this shop are prepared in "A" shop and are scheduled to arrive on the seventh day.

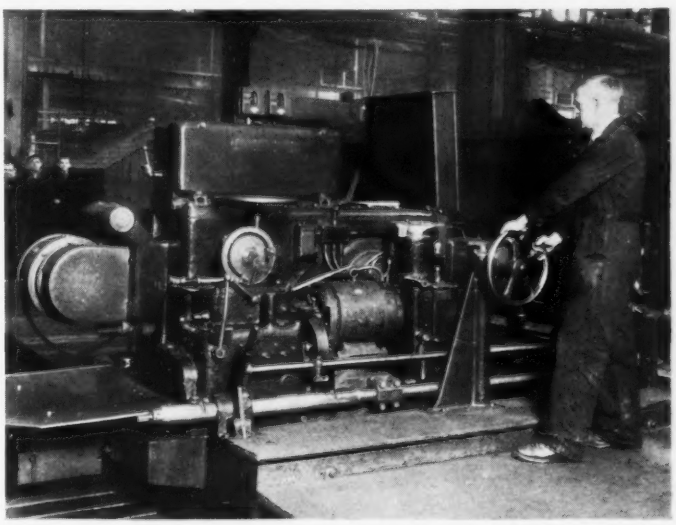
Tender Repairs

Tenders are repaired in "B" shop also, and, except in very special cases, tenders are changed so that the tender

(*Continued on page* 545)



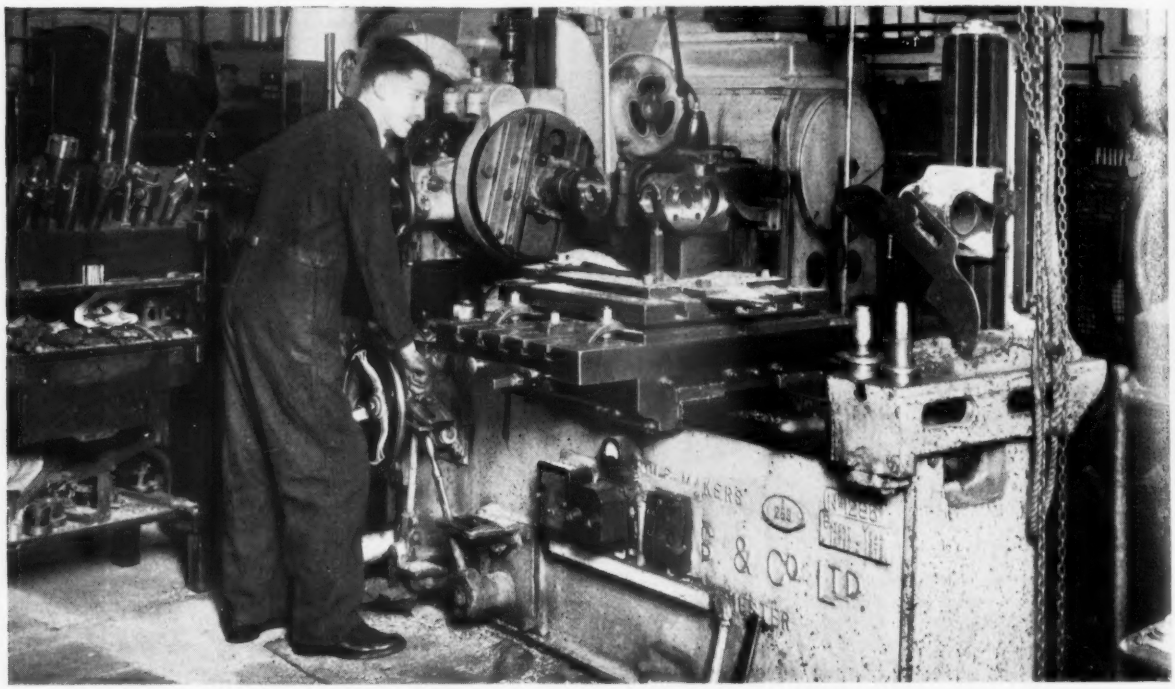
Zeiss optical lining-up apparatus, showing the Collimater set to the centre of cylinder



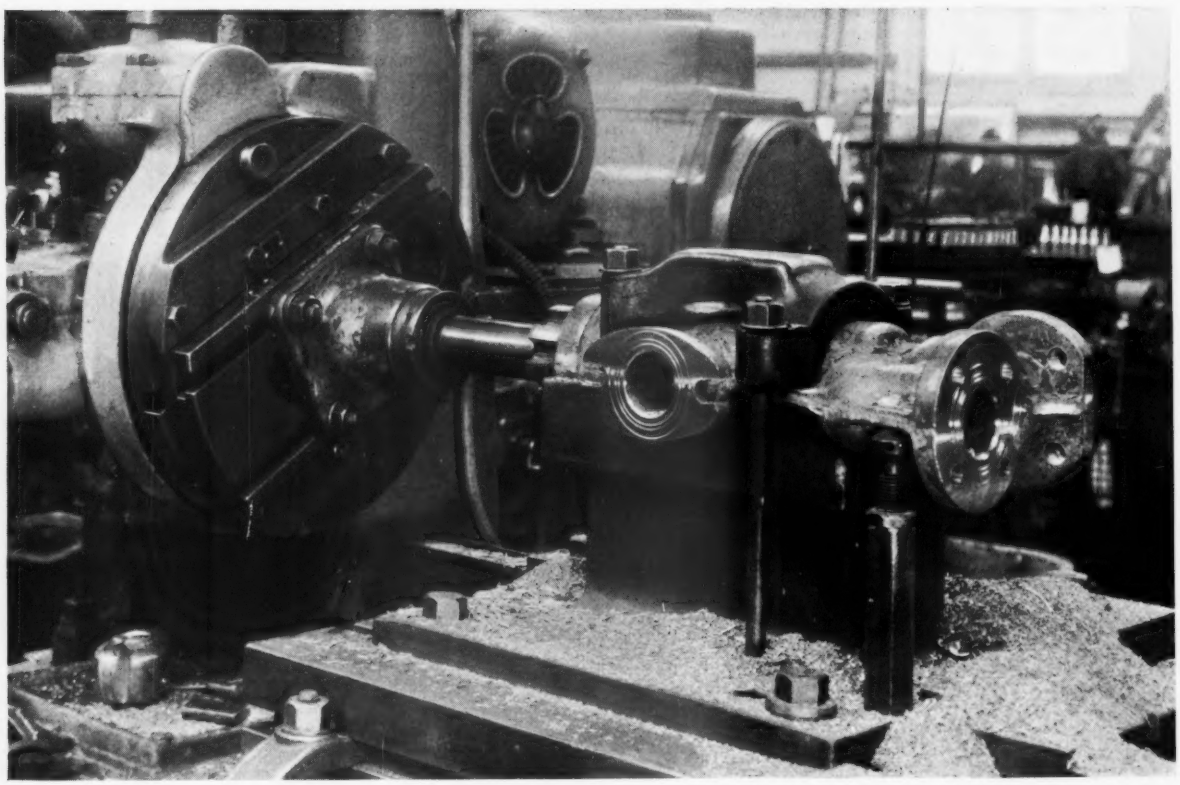
Horn guides being ground with a Broadbent horn grinder. Accuracy of grinding is checked by the Zeiss equipment

Locomotive Repairs at Swindon Works, Western Region

(See article on page 540)

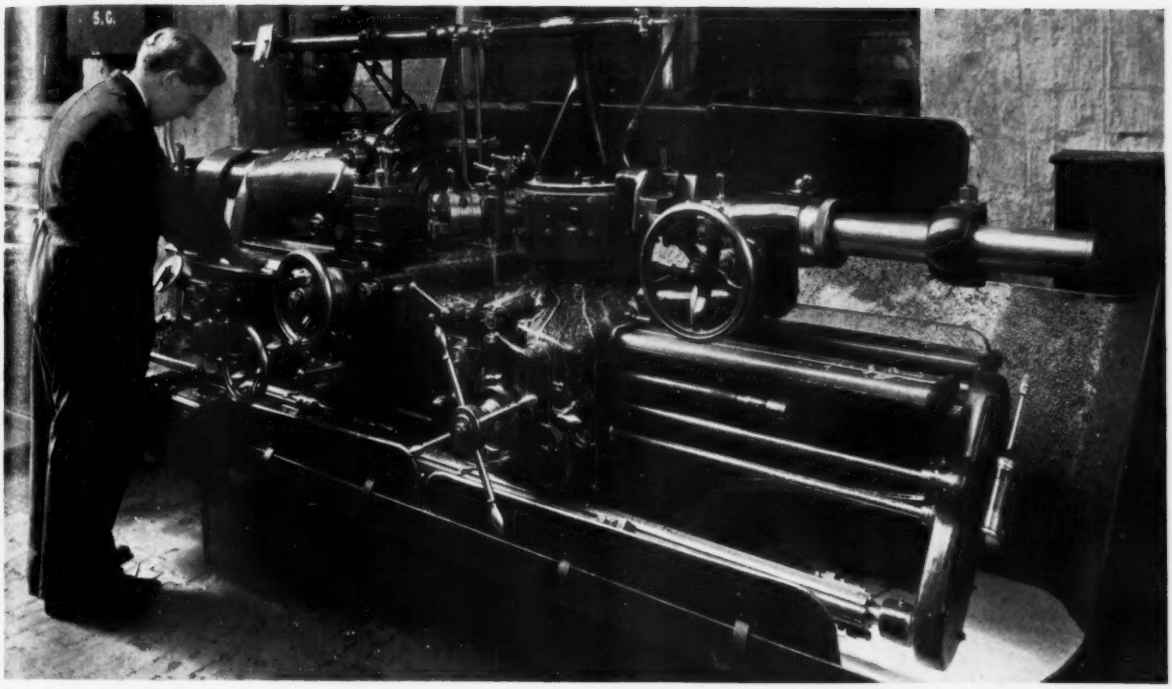


Kearns horizontal boring machine, set up for the complete machining of locomotive 10 *mm. re-start injectors*

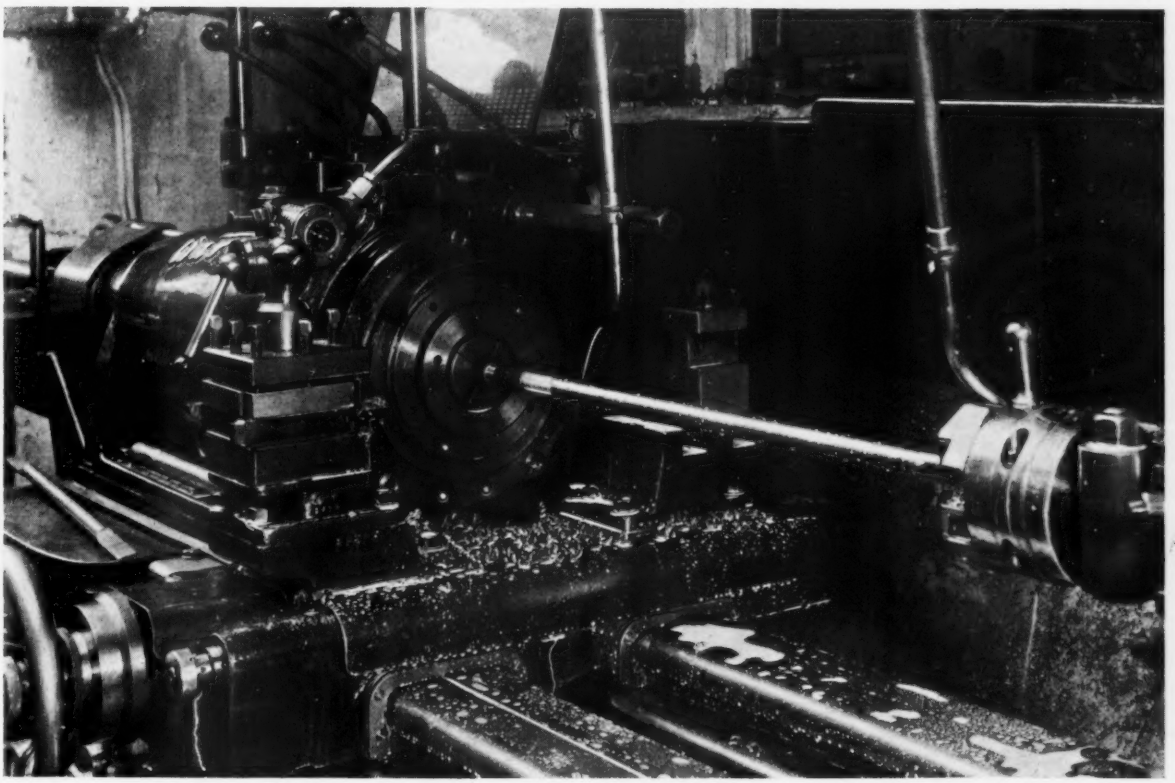


Showing the method of holding the injector on the swivelling table. Swindon special tooling is employed on machining

Locomotive Repairs at Swindon Works, Western Region



One of the No. 7 Ward stay lathes installed for the manufacture of firebox crown stays, showing the lead screw



Close-up of a completed roof stay. The stay is reduced between the threaded portion ; correctness of pitch of thread is assured by the lead screw

Locomotive Repairs at Swindon Works, Western Region

Webster & Bennett 60-in. boring mill employed on tyre boring operations

Showing the tool set-up for tyre boring developed at Swindon Works

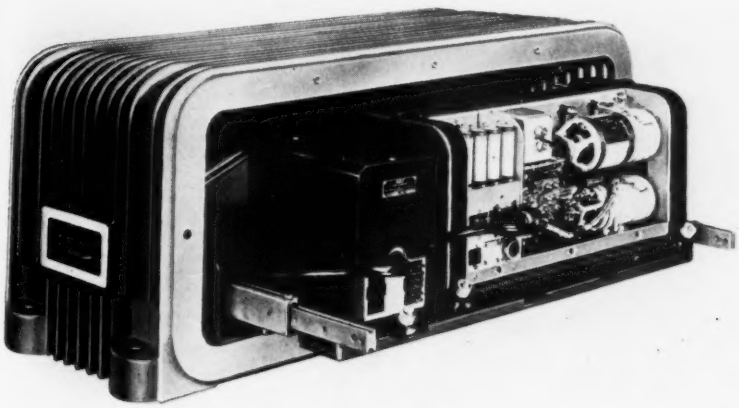
Wickman 6-in., chucking, five-spindle automatic for machining mud and fusible plugs

A close-up of the automatic showing completed mud plug ready for withdrawal after machining

Radio Equipment for Railway Use

Frequency-modulated transmitter and receiver mounted in a light-alloy case

A LOW-POWER v.h.f. radio-transmitter and receiver for use by railways, mines, and similar applications where rough usage may be expected, has recently been designed by General Electric Co. Ltd. engineers, and consists of a 15/20 watt frequency-modulated transmitter and receiver.



Radio transmitter and receiver mounted in dust and weatherproof case with chassis drawn forward on runners for servicing and maintenance of apparatus

The equipment can be installed in any position for remote control from the footplate of a locomotive, and resilient mountings are provided for the apparatus within the case; for servicing and maintenance the whole chassis can be withdrawn on runners.

A feature of the apparatus is the optional built-in selective calling device which is operated by a headquarters (fixed) transmitter modulated at audio frequency, so that uniselectors in the substation (mobile) receivers step round in sympathy with the audio impulses transmitted. Constant monitoring at the sub-stations is therefore not necessary, and at the wanted sub-station the operator's attention is drawn by a bell or light.

The selective calling system is applicable to simplex, two-frequency simplex, or duplex working, and is generally arranged so that all unwanted stations are locked-out during use of the main transmitter. It is always possible, however, to call groups, or all the sub-stations, by means of special dial numbers.

The actual number of sub-stations that can be called by this system is unlimited, though a two-digit scheme to cover 70 individual stations, or a three-digit scheme to cover 500, will suit most circumstances.

The v.h.f. equipment at the main or sub-stations can be supplied for mains or battery operation, and if the user wishes, amplitude modulated transmitters can be substituted for frequency modulated. Fixed and mobile stations are similar in appearance, except that the protective cover is usually omitted for headquarters stations, which may be remotely controlled at distances up to several miles. In the case of local control only, a simple control unit is needed, and use of the equipment follows a similar procedure to that with the ordinary telephone.

Brief details of the system are as follow:—

Dimension of mobile transmitter/receiver (in case)	33 in. × 18 in. × 16 in.
Weight	2 cwt. complete
Power output	15/20 watts
Power consumption (at 12-volt d.c. input)	Transmit : about 170 watts Receive : about 90 watts Standby : about 50 watts
Frequency	One within the range ; 31·5 to 184 Mc/s
Power supply	200/250 volts 40/60 c/s a.c. or 12 volts d.c.

Novel Axleboxes for Express Locomotives

(*Concluded from page* 539)

been dispensed with, special attention has been given to the means of mounting the body on the power bogies so as to ensure stability at speed. There are no bogie pivots of the normal type, but each bogie is attached to the locomotive frame by two links (Fig. 2). The links have a spherical bearing at each end, one in the frame and the other in a bogie bolster. These allow the links to swing laterally, and it will be seen from the diagram that if they move in opposite directions the result is rotation of the bogie relative to the locomotive body. The motion of the links is sufficient for negotiating curves of 4 ch. radius.

Relative movement laterally between body and bogie can also occur when each link moves in the same direction, but in either case the links tend to be restored to the vertical by their sprung transverse connections with the body. The forward and backward movement permitted to the links is very restricted, so that they transmit the traction forces in the same way as a normal bogie pivot. To complete the connections between locomotive frame and bogie there are two vertical loading points at each side (Fig. 3), with spring seatings to damp out side swaying of the body.

The type of connection described fulfils in itself the sometimes opposed requirements of a bogie suspension system, for while the two links combine in opposing lateral thrusts due to centrifugal force on curves, sideways movements of the outer axles caused by irregularities in the permanent way act only on the link nearest to them and meet with correspondingly reduced opposition.

This 7001. S.N.C.F. prototype locomotive which has already run more than 175,000 miles on the South Western system of the French Railways, has been specially designed for the South Eastern system, which is now in process of electrification, and its outstanding performance leads to the assumption that a considerable number of similar locomotives will be ordered by the S.N.C.F. in due course.

Locomotive Repairs at Swindon Works, Western Region

(*Concluded from page* 541)

under repairs seldom returns to the same engine as that with which it was sent to Swindon. This arrangement is possible in that with Western Region locomotives, one tender class covers several engines classes, the only difference being the shovel plate height which is adjusted if necessary to meet the requirements of the engine which is shown against the tender on a list published weekly by the Progress Office.

Repair parts for tenders are not given a repair time schedule as spares are used throughout, and a progress inspector is responsible for seeing that spare stocks are maintained.

Miscellaneous components such as safety valves, boiler mountings, injectors and similar details which are constantly changed are repaired in quantity, and consequently are not dealt with on the engine time schedule. The Progress Office is responsible for seeing that sufficient stocks of these items are adequately maintained.

Railway Convalescent Home, Llandudno

(See article on page 553)

Main entrance

Main lounge

A corner of the dining room

One of the bedrooms

RAILWAY NEWS SECTION

PERSONAL

TRANSPORT TRIBUNAL

Mr. J. C. Poole has been appointed a Member of the Transport Tribunal for a period of six years from May 4, 1950, in succession to Mr. H. E. Parkes, whose appointment expired on May 3.

Mr. J. S. Wills has been elected President of the Institute of Transport for 1950-51 and will assume office on October 1 next, on the retirement of Brigadier General Sir Osborne Mance. Mr. Wills is Managing Director of the British Electric Traction Co. Ltd.

Mr. George Caster, Mechanical Engineer, Gorton, Eastern Region, British Railways, retired on April 29.

Among recipients of the Legion of Honour at the French Embassy on May 2 was Major-General Sir Donald J. McMullen, for his work in connection with the "Mulberry" harbour.

At a recent council meeting of the Institution of Locomotive Engineers, Mr. A. Campbell (Chief Mechanical Engineer, Crown Agents for the Colonies) was elected a Vice-President, and Mr. R. F. Harvey (Motive Power Superintendent, Scottish Region, British Railways) was elected a Member of Council.

Members of the former General Committee of the Travel Association, now merged in the new British Travel & Holidays Association, gave a luncheon in honour of Lord Hacking, who was Chairman of the Travel Association, and Lady Hacking, at the Savoy Hotel, on May 4.

Mr. C. H. Thurber has been appointed Manager of the Canadian Car Demurrage Bureau.

Mr. Conrad Gribble, formerly Deputy Chief Civil Engineer, Southern Railway, whose engagement by the Crown Agents for the Colonies to conduct an investigation desired by the Government of Ceylon into the strength of its railway bridges was recorded in our issue of March 25, 1949, is now in England after completing a six-months tour. He expects to leave England for a second tour of six months in September. Meanwhile, his two assistants, Lt.-Colonel R. H. Eagan, formerly of the Burma Railways ,and Mr. B. Bramall, formerly of British Railways, Eastern Region, are continuing the work in his absence. Mr. Gribble is directing an inquiry to frame a programme to bring the bridges up to the strength required for the maximum anticipated loading, and a report is to be furnished on the general working of the Bridges Branch of the Chief Engineer's Department. Accommodation and all other facilities for the work are provided at Colombo by Mr. E. C. Wijeyesekera, Chief Engineer.

Mr. C. H. Brazier, who, as recorded in our March 31 issue, has been appointed Regional Staff Officer, Scottish Region, British Railways, entered the service of the L.S.W.R. in 1913 as a junior clerk and after station experience was transferred to the office of the London West Divisional Superintendent. He served in the Railway Operating Division, Royal Engineers, during the 1914-18 war. From 1928 to 1936 Mr. Brazier was Outdoor Staff Investigator attached to the Headquarters of the Traffic Department, Southern Railway, and relinquished that position on his appointment as Staff Assistant to the Docks & Marine Manager, Southampton. He became Outdoor Superintendent at Southampton Docks in 1940 and returned to the Traffic Department in 1941; he was appointed Staff Assistant to the Traffic Manager in 1942. Mr. Brazier was a member of all sectional councils representing operating, commercial, Continental and motive-power staff on the Southern Railway and Chairman of many section council sub-committees. In January, 1948, Mr. Brazier was appointed Wages Staff Assistant to Chief Officer (Staff & Establishment), Railway Executive, and he was appointed to the position of Staff Officer (Operating Staff), Railway Executive, in December, 1948. During the past two years Mr. Brazier has taken part in all the principal negotiations affecting wages grade staff between the Railway Executive and the railway trade unions.

Mr. C. H. Brazier

Appointed Regional Staff Officer, Scottish Region, British Railways

TRANSPORT ARBITRATION TRIBUNAL

Mr. W. H. Nevill has been appointed a Member of the Transport Arbitration Tribunal in the place of Mr. B. G. Catterns, who has resigned. Mr. Nevill was Secretary to the Bank of England from 1944 until his retirement in May, 1949. He is acting in an advisory capacity to the National Bank of Iraq and has been a Trustee of the London Trustees Savings Bank since 1943.

Mr. T. Ferguson, Consulting Engineer on Traction Matters, Metropolitan-Vickers Electrical Co. Ltd., has retired after 48 years' service with the company exclusively devoted to the development of electric traction.

Mr. A. E. Mimms, Mechanical Engineer for the Canadian Pacific Railway for the past two years, has retired after 32 years' service with the company. Mr. Mimms is a Member of the Institution of Locomotive Engineers, London.

The following have been appointed to the board of Associated British Oil Engines Limited:—Dr. J. W. Bondi, an Overseas Director of Associated British Oil Engines (Export) Limited, and a Director of British Oil Engines, S.A.; Mr. Bosworth E. Monck, Sales Director of Henry Meadows Limited; and Mr. J. T. Rymer, General Manager and a Director of Mirrlees, Bickerton & Day, Limited, of Stockport, and a Director of Associated British Oil Engines (Export), Limited, and of Associated British Oil Engines (Marine), Limited.

Mr. R. R. M. Barr, who, as recorded in our last week's issue, has been appointed Assistant Marine Superintendent, Parkeston Quay, British Railways, Eastern Region, joined the L.N.E.R. in 1923 as a traffic apprentice and, on completion of the usual training, held several apointments in the Traffic Departments at York, Newcastle and Hull. He was appointed Staiths Superintendent & Yardmaster at Blyth in 1937. As an officer in the Royal Engineers (Transportation) Supplementary Reserve, he was mobilised at the outbreak of war and served in France during 1939-40 as Docks Superintendent, Le Havre & Northern French Ports. He served in the Middle East from 1940 to 1943 as Docks Superintendent, Canal Area & Alexandria; also as D.A.Q.M.G. (Mov. & Tn.), Benghazi & Port Said. In August, 1943, Mr. Barr was appointed A.D. (Tn.), 21 Army Group, with the rank of Lt.-Colonel, and was responsible to the Director of Docks for the planning and operation of the ports in connection with the Normandy landings. He took part in the invasion of Europe and remained with 21 Army Group until he was demobilised in August, 1945. He resumed with the L.N.E.R. in September, 1945, as Docks Superintendent, Western Docks, Hull, and became Assistant Portmaster, Grimsby & Immingham, in July, 1947.

Mr. F. J. Wymer

Appointed Assistant Chief Regional Officer, Southern Region

The late Mr. R. F. Morkill

Lately Technical Officer, Railways, Inspecting Staff, Ministry of Transport, and previously Joint Signal Engineer, London Transport

The late Mr. C. F. de Pury

London West Divisional Superintendent, Southern Railway, and Southern Region, 1942-50

Mr. F. J. Wymer, C.B.E., M.Inst.T., who has been appointed Assistant Chief Regional Officer, Southern Region, British Railways, was educated at Merton Court School, Sidcup, and Eltham College, Mottingham. During the war he enlisted in the Royal Horse Artillery in 1916, and subsequently was commissioned in the Royal Garrison Artillery and served in France and Germany, 1917-19. He was Captain and Adjutant when demobilised. In 1920, Mr. Wymer joined the S.E.C.R. as probationer and he was appointed to the Rolling Stock Section, Office of the Superintendent of the Line, in 1923. In the next year he was transferred to the Trains Section of the London (East) Division, and to the Chief Operating Superintendent's Department in 1928. Mr. Wymer was appointed Assistant to the London (Central) Division Superintendent in 1930, and Assistant to the Traffic Manager for Special Work in 1931; he remained in the latter position until becoming Divisional Marine Manager, Dover & Folkestone, in 1934. In 1938 he was appointed Assistant Continental Superintendent, and in 1942 he became Assistant (Planning) to the General Manager. In 1945, Mr. Wymer was appointed Assistant Docks & Marine Manager, and in 1947, Assistant to Traffic Manager for Special Purposes; he was appointed General Assistant to Chief Regional Officer, Southern Region, in 1948. Mr. Wymer was made a C.B.E. (Military Division) in the King's Birthday Honours of 1943, for his work in connection with the Southern Railway Home Guard.

Mr. R. F. Morkill, M.C., until recently Technical Officer, Railways, Inspecting Staff, Ministry of Transport, and previously Joint Signal Engineer, London Transport, whose death, aged 73, we recorded last week, was born in Canada and trained as an electrical engineer. He received his first railway experience with the St. John's, Newfoundland, Electric Light, Power & Tramway Company. He served in the South African War and later had charge of signalling on the Central South African lines for a short period, the equipment of which was of a distinctive type. He went to New York, U.S.A., in 1910 and joined the Union Switch & Signal Company; he was associated with the signalling of the New York terminal of the Pennsylvania Railroad. Later he went to the General Railway Signal Company of Canada, which he left to become Signal & Electrical Engineer of the Grand Trunk Railway. He joined the Canadian Engineers in the war of 1914-18 and saw service in France, Belgium and Germany. After being transferred to the Royal Engineers, he formed and commanded the 200th Railway Signal & Interlocking Company, the first unit of its kind. He was awarded the Military Cross and was mentioned in dispatches; and when demobilised held the rank of Major. He joined Tyer & Co. Ltd. at its French works, and later became Manager at its Carlisle works. In 1925, he was appointed Superintendent of Signals & Telegraphs, Metropolitan Railway. When the London Passenger Transport Board was formed he became Assistant Signal Engineer (Maintenance), and was made an Officer of the Board in 1936. In 1940 he was made Joint Signal Engineer, with Mr. R. Dell. Mr. Morkill was seconded to the Railway (M) Division of the Ministry of War Transport in October, 1941, and retired from the L.P.T.B. on December 31 of that year. He was elected a Member of the Institution of Railway Signal Engineers in 1925, and was President in 1944. The funeral service was held at St. Lawrence's Church, Eastcote, and the interment was at Northwood Cemetery. Among those present, in addition to family mourners were:—

Lt.-Colonel G. R. S. Wilson, Chief Inspecting Officer of Railways, Ministry of Transport, and serving and retired colleagues: Mr. R. Dell, Signal Engineer, and Mr. W. H. Challis, Principal Executive Assistant, Signal Engineer's Office, London Transport, with other serving and retired colleagues; Mr. A. Moss, Signal & Telecommunications Engineer, Eastern Region (also representing those of the other Regions); Mr. M. W. Shorter, Director & Sales Manager, and Mr. C. F. D. Venning, Chief Signal Engineer, Westinghouse Brake & Signal Co. Ltd.; Mr. F. Horler, President, Mr. T. S. Lascelles, Second Vice-President, Mr. G. J. Dickin, Honorary General Secretary, and Mr. H. M. Proud and Mr. C. Carslake, Past-Presidents, Institution of Railway Signal Engineers.

We regret to record the death on May 7 of Mr. C. F. de Pury, London West Divisional Superintendent, British Railways, Southern Region, aged 61. He joined the London, Brighton & South Coast Railway in 1912, and served in the Office of the Superintendent of the Line until August, 1914. In 1919 he was placed in charge of the passenger claims section, and at the time of grouping was transferred to the Chief Operating Superintendent's office. He was appointed Assistant for the Commercial & Operating Departments in the Isle of Wight in 1925. In May, 1930, he became Assistant to the London (West) Divisional Superintendent, and in July, 1933, was appointed Assistant Superintendent of that division. In March, 1936, Mr. de Pury was made Western Divisional Superintendent, Exeter Central; and in March, 1941, was promoted to be Southern Divisional Superintendent, Southampton; he was appointed London West Divisional Superintendent in 1942. Mr. de Pury was mobilised with the Artists' Rifles in the 1914-18 war, and served in France and Germany in the Royal Fusiliers and Railway Transport Establishment.

London Midland Region Appointments

The following staff changes are announced in the London Midland Region of British Railways:—

Mr. J. W. Phillips, District Motive-Power Superintendent, Derby, to be District Motive-Power Superintendent, Leeds.

Mr. C. S. Cocks, Chief Locomotive Draughtsman, Chief Mechanical Engineer's Department, Brighton, to be Chief Technical Assistant, Chief Mechanical Engineer's Department, Derby.

Mr. A. R. Crighton, Locomotive Shed Master, St. Margarets, Edinburgh, to be Assistant District Motive-Power Superintendent & Locomotive Shed Master, Derby.

Mr. A. S. Gillitt, Locomotive Foreman, Basingstoke, to be Assistant District Motive-Power Superintendent & Locomotive Shed Master, Bank Hall.

Mr. I. M. Loder, Junior Assistant to District Operating Superintendent, Cardiff, to be Assistant to District Operating Superintendent, Liverpool (Lime Street).

London Area Passenger Charges Scheme

Opening of inquiry by Transport Tribunal : Estimated B.T.C. deficits for this year

The inquiry into the draft London Area (Interim) Passenger Charges Scheme prepared by the British Transport Commission for submission to the Transport Tribunal opened in the Hoare Memorial Hall, Church Street, Westminster, S.W.1, on Tuesday and is expected to last at least a month. Notices of objection have been lodged by 109 organisations representing more than 10 million people.

The plan covers all road and rail services of London Transport, together with suburban services of British Railways within the area served by London Transport buses, and services on the London, Tilbury & Southend line, and it is designed to establish as far as possible equality of passenger fares within the area. Approval is hoped for by the B.T.C. in time for new charges to be introduced by October 1 when London Transport Executive is due to begin the conversion of trams to buses in South London. Sir William Bruce Thomas, K.C., President of the Transport Tribunal, is presiding over the inquiry.

A statement of outcome of operations presented by the B.T.C. to the Tribunal puts gross working profit from all operations this year at £38·1 million, comprising £17·8 million from the railways, £2·4 million from London Transport, £11·6 million from other principal activities and income from interest rents, of £6·3 million.

Against this must be charged administration expenses of £1·4 million, interest of £44·6 million, freight rebates of £3·6 million, capital redemption of £2·8 million, and special items accounting for £800,000 to give a total of £53·2 million.

Additional Income Expected

Additional income expected in 1951 is £10·5 million from the full year's operations of the higher freight rates and a net increase of £3·2 million, from the new London passenger scheme. These items amount to £13·7 million which when deducted from the 1950 deficit of £15·1 million, give a loss of £1·4 million.

The deficits for both 1950 and 1951 have been calculated before making any allocations to liquidate accumulated deficiencies, to create a general reserve, or to provide for enhanced cost of replacing wasting assets. Accumulated losses at December 31 next are estimated at about £40 million and enhanced cost of replacing wasting assets is put at £10 million, at existing price levels.

Mr. Lionel Heald, K.C., for the B.T.C., said that before the war the general level of ordinary fares of London Transport had not differed substantially from those on the four main lines, but as a result of wartime and post-war increases Railway Executive fares generally had gone up by 55 per cent. above pre-war. London Transport fares had gone up only to 25 per cent. above pre-war. In addition there had been a differential increase between the railway section of London Transport and other services whereby the rail fares had had an increase of 10 per cent. added to them.

The result of that was that there were now three quite different and inconsistent scales of charges for people travelling over the same distance. There was clear evidence that the use of one service against another at peak hours was dislocating matters because people could travel at a materially cheaper rate by certain routes. The scheme sought to restore equality, provide a choice of services at substantially the same cost to passengers, and see that the loading of trains might be evenly distributed. The result was that London Transport fares would go up and Railway Executive fares would come down.

Mr. Heald described the existing workmen's tickets as "an anachronism today" and said that it was impossible to categorise a "workman" so that the tickets were simply restricted to people travelling at certain times. It was proposed to discontinue the term "workman" in relation to the tickets. The fares were entirely uneconomic, but the complete abolition of cheap morning travel facilities would undoubtedly cause hardship.

The Commission therefore proposed a new category of fares purely for cheap early morning travel at a higher scale than the existing workmen's fares to be available on buses as well as trams. This system would mean higher fares for 600,000 people who had previously got workmen's tickets, but lower fares for 250,000 people who travelled in the early morning by bus, and had not for that reason been able to get cheap tickets.

Effect of Petrol Tax

Answering the suggestion that London was to be asked to make an unduly large financial contribution Mr. Heald quoted figures to show that the total revenue required for passenger operations in the London area for the first year in which the new charges could operate was £82·6 million.

The gross receipts in such a year at the present charges, *plus* additional net receipts from the proposed new charges scheme, and allowing for reduced expenditure under that scheme, would total £80·5 million. Without the increased petrol tax, which had had to be allowed for, the total revenue requirements would have amounted to £81·2 million. The Commission did not, however, ask for any amendment in view of the extra £1·4 million cost.

The Chairman: Apart from the petrol tax, you would not have broken quite even?

Mr. Heald: That is so.

The first witness was Mr. A. B. B. Valentine, Member of the London Transport Executive, who said that the scheme would not apply in an area where the B.T.C. controlled practically the whole of the road services as well as the railways. They were not yet in a position to put forward a complete scheme for the whole of the railways of the country without further investigation and preparatory work. They were engaged in that work now, but it would be a considerable time before it was completed.

The Chairman said it was stated that the main objects of the scheme were to secure equality of fares. Was it more than an accident that they would get several millions more in gross receipts from the fares, or was it one of the objectives?

Mr. Valentine: It is more nearly true to say that it is one of the objectives. When we framed the scheme its objectives had necessarily to have regard to effect on revenue. When the timing was approximately known, some guidance had to be given to those who were framing it as to the revenue result.

The ordinary fare traffic on London Transport accounted for 90·9 per cent. of the total traffic expressed in terms of passenger journeys. He agreed with Mr. Heald that there were discrepancies in charges before the war, and the main cause of the present situation was that some charges had been increased before the war.

Mr. Valentine said that the wide disparity between season ticket rates was the most serious of all from the point of view of handling peak hour traffic. In the peak hours, when the greatest demands were made on all the services, it was most important that traffic should be freely distributed over all available services.

The Tribunal adjourned until Wednesday.

DECENTRALISATION OF LARGE ORGANISATIONS.—Problems of decentralisation in the administration of large organisations is the subject chosen by the council of the Chartered Institute of Secretaries for the first competitive essay for the C. R. Heathcock prize. Entry is open to fellows, associates, and licentiates of the Institute until November 1 next.

RAILWAY BENEVOLENT INSTITUTION.—At its meeting on April 26 the board of the Railway Benevolent Institution granted annuities to 11 widows and nine members amounting to £378 7s. per annum, one funeral gratuity of £10, and authorised 57 grants amounting to £576 3s. from the special benevolent fund in cases of immediate necessity. Grants made from the casualty fund during the month of March amounted to £845 0s. 6d.

B.T.H. ELECTRIC TRACTION EQUIPMENT ON VIEW.—The electric traction exhibit at the B.I.F. of the British Thomson-Houston Company comprises a complete traction control unit of the latest type of PCM equipment as supplied to London Transport, arranged to control a model electric train. The control unit is mounted so that the operation of the various parts can be readily observed and the actual operation of the train control is illustrated on an illuminated diagram.

CROMPTON PARKINSON LIMITED AT THE B.I.F.—The exhibit of Crompton Parkinson Limited at the British Industries Fair, Birmingham, includes: Standard induction motors from the range of 2,000 types for ratings up to 200 b.h.p. and 6,600 V.; Minor f.h.p. motors; Nelson stud welding equipment; and portable instruments designed for use in all climates. There is displayed in addition a range of motors, generators, alternators, switchgear, meters, lighting equipment, and batteries.

LENGTH OF PUBLIC SERVICE VEHICLES.—An increase of 1 ft. in the maximum length of four-wheel double-deck buses and of 2 ft. 6 in. in the case of four-wheel single-deck buses is permitted under Regulations recently made by the Minister of Transport. Double-deck vehicles registered for the first time on or after June 1, 1950, may be 27 ft. in length instead of 26 ft., while single-deck vehicles may be 30 ft. instead of 27 ft. 6 in. The new Regulations are the Motor Vehicles (Construction and Use) (Amendment) Regulations, 1950, and the Public Service Vehicles (Conditions of Fitness) (Amendment) Regulations, 1950.

Canadian Pacific Railway Company

Decrease in traffics with rising costs: progress in dieselisation

The annual general meeting of the Canadian Pacific Railway Company was held in Montreal on May 3; Mr. George A. Walker, Chairman of the company, presided.

Addressing the meeting, the President, Mr. W. A. Mather, said that whilst in 1942 Canada continued to show a measure of prosperity, and their gross earnings from rail operations were again a record, there was nevertheless a reduction in volume of business handled. Revenues from rail operations were $30 million below the requirements established in the most recent judgment of the Board of Transport Commissioners. The deficit over the past three years was estimated at $81 million, largely due to delays between the time when the railways applied for relief, and the time such relief had been granted.

The favourable decision of the Supreme Court in their appeal against the judgment of the Board of Transport Commissioners in September, 1949, postponing final determination of the application of the railways for a 20 per cent. increase in freight rates enabled the railways to apply again to the Board. The final increase, however, of 16 per cent. authorised would fall short by over $7 million of yielding annually even the earnings allowed under the formula of the Board. Application was made by the Railway Association of Canada to the Board for revision of its order to bring the authorised increase from 16 per cent. up to 20 per cent. Hearings were held on this application on April 17, and judgment had been reserved. Meanwhile, seven Provincial Governments, which had opposed the applications of the railways for rate relief, had petitioned the Governor in Council by way of appeal from the judgment awarding the 16 per cent. increase.

Low Freight Revenue

Despite freight rate increases which had been approved, the average revenue for all traffic was approximately 1·2 cents per ton-mile. In 1947, they received 0·9 cents to haul a ton of bituminous coal one mile. Lumber, pulpwood, and so on, produced an average revenue of little over 1 cent per ton-mile, while grain and grain products moved at only 0·6 cents per ton-mile. In 1949 they paid out $235 million to 87,000 employees and $11 million in taxes to various Governmental treasuries. Of total expenditure for materials and supplies, some $148 million was spent in Canada.

Non-rail enterprises produced earnings only slightly lower than those of the peak year 1948. The freight traffic of ocean steamships was adversely affected by reduced purchasing by overseas customers as a result of dollar shortage; but passenger business held up very well.

Dieselisation

Because of conditions peculiar to Canada, progress in dieselisation must be slower than in U.S.A., and the introduction of diesel-electric units was undertaken only after careful analysis of operating features, with regard for the efficiency and economy anticipated in the area of their assignment. They had begun in 1942 to acquire diesel yard switchers. By the end of the present year, 103 units of that type would be in service at various points throughout the system. More recently a start was made in introducing diesels in road service, 33 units being already in operation.

With the increase of 16 per cent., which became effective on March 23, Canadian freight rates, to which increases were applicable, were now 40·4 per cent. above pre-war level. The exemption of western grain from any increase and the lower increases allowed for coal and coke reduced the percentage on all traffic quite sharply. In their own case the effective percentage increase was only 27·6 per cent. This compared with an average increase of nearly 75 per cent. in wages and material prices entering into operating expenses. Expenses in 1949 were $127 million higher than they would have been at the 1939 price and wage levels, while all rate changes at the 1949 level of traffic would probably produce only $86 million.

Wage Negotiations

The majority report of either Board of Conciliation recommended an increase of 6·6 per cent. in basic wages and a maximum 44-hr. week. There was no way to satisfy demands which must result in higher operating costs, whether because of higher wage scales or easier working conditions, except to increase charges. If Canada was to continue to dispose abroad a large part of her surplus products, there must be an end to rising costs and charges. Price levels in Canada must not get out of line with prices at which Canadian goods could be exported. For these reasons it had been decided to resist any adjustments in wage scales or conditions of employment which departed substantially from the findings of the Boards of Conciliation. This decision had been communicated to the Minister of Labour. It was the conviction of the directors that, if rational solutions were to attend labour disputes when collective bargaining had failed, the objective reasoning and judgment of the intermediary appointed by law should be given full weight.

They had stated to the Royal Commission on Transportation their belief that the essential problem was to furnish adequate and modern transportation service at the lowest possible cost. This involved ensuring that Canadian railways be made financially sound. They themselves acted on the assumption that it was in the interest of Canada that the Canadian Pacific should continue privately owned. As a public utility, they accepted regulation as necessary and useful and not inconsistent with private ownership.

C.N.R. Recapitalisation Proposals

Whilst they themselves had no direct interest in the financial affairs of the Canadian National Railways, they were deeply concerned in any reduction in the fixed charges of that company without adequate safeguards, so that they would not be prevented from earning a reasonable return on their railway investment. Scaling down of Canadian National fixed charges without safeguards would present a serious threat to the Canadian Pacific as a privately-owned railway. The danger lay partly in the possibility that pressure would be exerted to use the Canadian National as a yardstick in rate-fixing and to treat its requirements as restricted to the amount of its reduced fixed charges together with a small surplus; and in the fact that the recapitalisation proposals of the Canadian National made no commitment for payment by the Canadian National of any earnings over reduced fixed charges as a return to the Government on its investment; thus substantial sums might be retained for betterment to the property or other purposes, and place the Canadian Pacific in an even more disadvantageous position.

Continuance of dieselisation, said Mr. Mather, was an important aspect of their plans for capital expenditure. Over the next five years the requirements for new motive power were $68 million. Freight and passenger equipment would require expenditure of some $196 million in that period. Improvements such as new signal installations and additional passing tracks required $136 million. The total requirements were $400 million. In one respect this was a minimum, far less than they would contemplate if the financial position were better. Considered in the light of the low current rate of return on the investment in railway property, it was a maximum programme.

L.M.R. Ambulance Competition

The final of the ambulance competition of the London Midland Region of British Railways was held at Belle Vue, Manchester, on May 5. The maximum number of points was 480, and the results were:—

	Points
1. Wolverton	384½
2. Camden "A"	374½
3. Crewe Works Machine Shop "A" ...	369½
4. Derby C.M.E. Boiler Shop "B" ...	346
5. Bolton Loco.	336
6. Crewe Machine Shop "B"	330
7. Castlethorpe	325½
8. Wyre Dock	304½
9. Warrington	300

Mr. John Elliot, Chief Regional Officer, London Midland Region, was present at the prize-giving, where Mrs. Elliot presented the trophies to the winning teams, and Mr. R. Simpson, Regional Staff Officer, was Chairman. The judges were: Dr. R. A. Dench (team test); Dr. F. L. Richard (individual tests, No. 1); and Dr. W. George (individual tests, No. 2).

TUBE INVESTMENTS AT THE B.I.F.—The stand of Tube Investments Limited displays products of the precision steel tube and aluminium companies in this group. A wide variety of seamless and welded tubes in steel, stainless steel, and aluminium alloys is on view, and an indication is given of the purposes to which they are put. Many non-circular and intricate composite bore tubes for scientific purposes are shown, with some unusual examples of tube manipulation. House building units in cold rolled-metal sections are demonstrated, as well as large aluminium extrusions.

G.E.C. DISPLAY AT THE B.I.F.—The exhibit of the General Electric Co. Ltd. at the British Industries Fair, Castle Bromwich, includes sections devoted to airport lighting equipment; street lighting; and motors, motor control gear, and accessories. The last named section includes motors for the textile industry; steelworks motors; a.c. and d.c. industrial motors; motor starters; and electronic equipment for motor control. There will be on view a special high-torque motor designed to overcome the high inertia of carding engines on starting; also the G.E.C. automatic ring spinning frame commutator motor, and a demonstration electronic motor control unit.

Parliamentary Notes

Road Haulage Services

Opposition charges Transport Commission with discrimination against the private road haulier

The Government was saved from defeat in the House of Commons on May 1 by the casting vote of the Chairman of Committees, Major James Milner, when, with the House sitting in Committee of Supply, the Opposition moved to reduce the Ministry of Transport vote by £1,000.

Mr. Peter Thorneycroft (Monmouth—C.) who opened the debate, concentrated attention on the problems of the free road hauliers—that section, he said, of the road haulage industry which was not yet nationalised. The lorries in the hands of the free hauliers, he stated, were two or three times the number in the hands of the Road Haulage Executive. Long-distance road haulage had been taken over under the Transport Act, 1947, but there had been certain exceptions to the take-over. The short-distance haulier might operate his lorries within a narrow radius of 25 miles; but for any journey or traffic beyond that radius he had to apply for a permit, not to an independent tribunal, but to his principal competitor, the British Transport Commission. In addition, there were certain traffics which were not included in the take-over, although the Government had to some extent encroached on them because some of the firms it had taken over, like Pickfords, had branches engaged on those traffics.

Abuse of Power under Transport Act

The Opposition's charge against the Government, said Mr. Thorneycroft, was that it had abused its position under the Act, and had used the vast resources of the State and its immunity from any need to apply to an independent licensing authority to encroach on the excluded traffics; also, so far as the short-distance hauliers were concerned, that it had used its power to refuse licences or permits in such a way as to drive many of them out of business. If any private road haulier applied for extensions to his licence or his fleet within the 25-mile limit, he was opposed not so much by his fellow hauliers as by the Road Haulage Executive; but the Executive did not have to go to a tribunal or a licensing authority at all.

Continuing, he contended that petrol rationing had proved a most convenient method of injuring the interests of the free section of the road haulage industry, and asked what rationing of petrol there was for the Road Haulage Executive. However, perhaps the most important weapon which the Government and the British Transport Commission used for eliminating the inconvenient competition of road haulage was the refusal of permits. There were various methods: One was outright refusal; another was to grant a permit for the outward traffic but deny it for the return load. Applications were turned down right away if any flaws whatever were found in them; no lawyer could be so pedantic as the Road Haulage Executive in exercising a judicial decision on its principal competitors.

Mr. James Harrison (Nottingham, East—Lab.) suggested that for a long time now road hauliers had not been in a position to face fierce competition. There had always been a limitation in the number of firms permitted to operate in any given area. It had never been suggested, nor was it contained in the Bill, that the Transport Commission's road undertaking should not compete for traffic. The condition in the Bill was that certain traffic should be excluded from nationalisation; but it did not exclude the Commission's vehicles from competing for that traffic.

Mr. C. C. Poole (Birmingham, Perry Bar—Lab.) said he regarded the complete integration of transport as the only sane and intelligent policy. In 1947, the number of goods vehicles operating in this country had been 555,000. By November, 1949, that figure had risen to 783,000, yet there had been very little increase in the traffic operating. He suggested that must result in an entirely uneconomic use of available transport. Of those 783,000 vehicles, 36,000 were in the hands of the Transport Commission.

Mr. Poole said he was not happy about the way the small road operators were being treated. He could not think it was right, nor that the House had ever intended, that men should neither by taken over nor left with enough traffic to earn a living. Either they must be taken over and compensated, or left with their vehicles and traffic.

Sir David Maxwell Fyfe (Liverpool, West Derby—C.) said the main complaint of the Opposition was that there was a disregard not only of the haulier's position but of the position of those who employed him and depended on him. Speeches by Members on the Government benches had shown a complete disregard of the problem of lower transport costs. They would not face up to the point that, unless people were able to get what they considered more efficient and cheaper transport, the result would be to add to the costs of production. Their first regard was to build up their own road services to be worked in conjunction with the nationalised railways; and any efficient competitor was an embarrassment.

Minister's Reply

Mr. Alfred Barnes (Minister of Transport) said that to suggest the road haulage industry should have been carried on, or was entitled to be carried on, without any disturbance at all after the passage of the Act was not fair. Under Part III of the Transport Act it was laid down that the Road Haulage Executive had to take over those firms the majority of whose work had been long-distance transport. There was no alternative. Although the Commission had acquired a considerable proportion of those long-distance firms by voluntary agreement, nevertheless it was implicit in the Act that it should eventually take them all over by compulsory acquisition. That process was now practically complete.

It had also been recognised that there would be many undertakings which would not come under the formula and be compulsorily acquired, but which had a considerable proportion of work reaching beyond the 25-mile radius. The Transport Act provided that those individuals could apply for an original permit for that part of their business which went beyond the 25-mile radius. If the Transport Commission, functioning through the Road Haulage Executive, imposed any conditions, as it was foreseen that it would, which interrupted their business in any substantial way, their alternatives were either to require the Commission to take over the whole business, in which case they would receive compensation terms similar to those of organisations taken over in the first instance, or to require the Commission to take over the relevant part of the business which had been seriously interfered with by any limitation of the permit. The other concerns not covered by that arrangement were dealt with by ordinary and job permits.

The number of applications for original permits—that was, those in before August 2, 1949—totalled 17,246. Of that number, 10,974 had been granted, and 2,214 refused; 4,025 were invalid applications—put in unnecessarily—and there was a balance of 33 pending decision. The number of undertakings which had applied to be taken over under section 54 of the Act was 167.

Mr. Barnes said that the first restriction on the field of road haulage had been by the Opposition in 1933, when it had laid down conditions as to the entry of new persons into the industry. Nevertheless, in 1949, 85 "A" licences had been granted, 2,606 "A" contract licences, and 1,735 "B" licences, making a total of 4,426 new entrants into the industry. In 1949 there had been 672,301 "C" licensed vehicles. In addition—and that was in the field in which Opposition Members stated that the free haulier had not a fair chance—there had been 129,460 "A" licences or "A" contract licences or "B" licences, a total of 801,761 private commercial vehicles. Against that, the Road Haulage Executive had 36,312 motor vehicles and the railways 13,078, a total of 49,390. In other words, for every Transport Commission commercial lorry on the roads there were 16 commercial vans or lorries owned by private enterprise. He suggested that it was sheer nonsense to talk about a monopoly, unfair competition or the crushing out of the small operator.

Continuing, Mr. Barnes said it was continually suggested that the Transport Commission, in taking over undertakings, was not meeting its obligations with regard to compensation. From inquiries he had made, he had found that in almost every case where the full compensation had not been paid it was due to the private operator being unable to submit proper and adequate accounts of his business.

The position at March 31, 1950, had been as follow: 1,672 road haulage undertakings transferred to the Commission, and provisional ascertainments of compensation made in respect of 1,234 of those claims. In well over half of the cases outstanding the claims were still awaiting accounts or other information from the transferers. Nevertheless, the compensation provisionally ascertained in the 1,234 cases mentioned was £21,546,000, and in making payment on account the Commission retained 10 per cent. in accordance with the Act, pending final ascertainment of the total payable in each case.

THE YORKSHIRE COPPER WORKS: DISPLAY AT B.I.F.—The exhibit at the British Industries Fair of the Yorkshire Copper Works includes a range of boiler, steam, and superheater flue tubes; also on view are Yorcalon copper tubes for water pipe lines and panel heating installations, and Yorkshire light-gauge copper tubes and fittings for oil feed and lubrication, and air-operated control and brake pipe lines for electric railway rolling stock.

Questions in Parliament

Compensation for Loss of Office

Lt.-Colonel M. Lipton (Brixton—Lab.) on May 1 asked the Lord President of the Council what was the total compensation for loss of office or emolument which had been paid or become due from industries now nationalised.

Mr. Herbert Morrison (Lord President of the Council): As far as it has been possible to ascertain in the time available, I understand that the total expenditure incurred by the various boards up to March 31, 1950, has been about £600,000.

Passenger Service Vehicles

Mr. J. Baird (Wolverhampton, North East—Lab.) on May 1 asked the Minister of Supply (1) how many motor buses had been exported from this country in 1949; and what was the programme for 1950; and (2) what proportion of the motor bus production of this country was allocated to the home market.

Mr. George Strauss (Minister of Supply), in a written answer, stated: In 1949, approximately 3,000 passenger service vehicles, including chassis, were exported. A fixed proportion of output has not been allocated to the home market in 1950. Manufacturers have been given quotas which provide for the supply of 8,800 vehicles to the home market during the year and have been asked to export the balance of their export.

Freight Charges and Coal Prices

Mr. Martin Lindsay (Solihull—C.) on May 4 asked the Minister of Transport what he estimated would be the average increase in the price of coal, both for industrial and domestic uses, resulting from the increase in freight charges.

Mr. P. J. Noel-Baker (Minister of Fuel & Power), who had been asked to reply, stated in a written answer: It is estimated that the average increase for the country as a whole will be 1s. 6d. a ton for industrial, and 2s. 6d. a ton for domestic, coal.

Use of Great Central Hotel

Lord Hawke in the House of Lords on May 3 asked His Majesty's Government whether the transport Executives intended to free the Great Central Hotel, Marylebone, in time to house visitors to the Festival of Britain.

Lord Lucas of Chilworth (Parliamentary Secretary, Ministry of Transport): The former Great Central Hotel, Marylebone, has been completely converted for use as offices and can no longer be used as an hotel. Therefore, even if these premises were to be vacated by the Railway Executive, the Road Haulage Executive and the Hotels Executive, they could not serve the purpose which Lord Hawke advocates.

Lord Hawke: Will the Minister impress on the Transport Commission the importance of reducing the numbers of persons engaged in administrative duties at these transport headquarters to as near as possible the level prevailing before nationalisation?

Lord Lucas: That is a consideration which is always before the Transport Commission.

Staff & Labour Matters

Differential for Shopmen

Sir John Forster, Chairman of the Railway Staff National Tribunal, has published his decision (No. 50.CH) in regard to the N.U.R. claim that the differential which was granted under Minute 1629 of February, 1944, to shopmen when transferred to conciliation grades should be retained.

Minute 1629 ruled that workshop staff transferred to conciliation conditions be paid 2s. a week over conciliation rate, this allowance to be personal to the existing staff, and their successors to be paid the appropriate rate for the grade to which appointed. Certain pay adjustments were made in February, 1948, and the allowances merged, contrary to the N.U.R. contention, in the new rates.

The Railway Executive claimed that the N.U.R. accepted that the basis of the allowance was compensation for increased standard hours on transfer from workshop to conciliation conditions, and that it was never intended that the allowances should be permanent. The N.U.R. contended that the allowances were not paid only on account of the variation in standard hours at the time the arrangement was made. The staff transferred to conciliation conditions ought not be in a worse position than if they had remained under workshop conditions.

After consideration of the evidence and submissions of the parties Sir John Forster found in favour of the N.U.R.

L.N.E.R. Athletic Club House

On May 4, at Rowms Lane, Swinton, Mr. C. K. Bird, Chief Regional Officer, Eastern Region, British Railways, formally opened a club house on the site of the sports ground. This scheme, said Mr. Bird, represented a happy coming together of all parties interested in the welfare of railwaymen around Mexborough. He handed over a cheque for £1,000, this being the last instalment of a loan of £6000 made to the club. A condition of the loan stated that no money need be repaid for the first five years.

Mr. Bird was introduced by Mr. E. W. Rostern, President of the club and Operating Superintendent, Eastern and North-Eastern Regions, British Railways. In his address he mentioned that he had been closely associated with the work and that it was due to people who had the welfare of the members at heart that such a happy occasion as the opening of a new club house was possible.

Mr. H. H. Halliday, Regional Staff Officer, Eastern Region, and Chairman of the Recreation Committee, congratulated the Club Committee on its work.

Votes of thanks were proposed to Mr. Bird and Mr. Rostern by Mr. R. L. Vereker, formerly of the Motive Power Department, Mexborough, and now at Ardsley, and by Mr. R. Redpath, formerly Stationmaster at Mexborough, and now at Peterborough. Mr. G. Hobson, Chairman, and Mr. H. Purshouse, General Secretary, addressed the gathering of committee members, railway officials, and club members, as also did Mr. Wakefield, Treasurer.

Among others present at the ceremony, were:—

Messrs. J. F. Harrison, Mechanical & Electrical Engineer; L. P. Parker, Motive Power Superintendent; W. S. Barnes, Estate & Rating Surveyor; R. B. Temple, District Goods Manager, Sheffield; E. J. Stephens, District Operating Superintendent, Doncaster; G. H. Taylor, Carriage & Wagon Works Manager, Doncaster; J. E. Jackson, District Surveyor, Manchester; A. R. Ewer, District Motive Power Superintendent, Doncaster; R. L. Vereker, District Motive Power Superintendent, Ardsley; A. Rose, District Engineer's Office, Sheffield; H. H. Beastall, Shed Master, Motive Power Department, Mexborough; J. Cartledge, Goods Agent, Mexborough; H. Parker, Stationmaster, Mexborough; R. Redpath, Stationmaster, Peterborough.

Club officials present included Messrs. Sykes, Anstock, and Daykin, and the ladies' committee.

(Left): Mr. C. K. Bird, Chief Regional Officer, Eastern Region, British Railways, opening the L.N.E. Athletic Club House at Swinton. (Right): Eastern Region officers, officials of the club, and guests who attended the official opening

New Railway Convalescent Home at Llandudno

Property in North Wales recently adapted as a home for railwaywomen

For some years, the employed women on the railways have desired a convalescent home of their own, and the Trustees of the Railway Convalescent Homes have now been able to supply this need by purchasing the premises known as the Old Abbey, Marine Drive, Llandudno. These have now been adapted for the purpose, and were opened formally on Tuesday last, May 9, by Lord Latham, President of the Railway Convalescent Homes, and Chairman of the London Transport Executive.

This home, which is the tenth of the group, will accommodate about 45 patients, for 2, 3, or 4 weeks after sickness, accident, or operation. It is situated on the south side of the Great Orme, where the climate is mild all the year round, and the very fine views embrace Conway Castle, the Menai Straits, and Anglesey. The main lounges are spacious and well furnished. The bedrooms are large, and are arranged to take 2 and 3 patients in each room. Every bedroom has hot and cold running water installed, and all have been refurnished with vi-spring divans, new wardrobes, and dressing tables.

Among those who accepted invitations to the opening ceremony were:—

Messrs. John Cliff, Deputy-Chairman, London Transport Executive; W. P. Allen, C.B.E., Member, Railway Executive; S. E. Parkhouse, O.B.E., Chief Officer (Operating), Railway Executive; R. Burgoyne, Regional Staff Officer, Western Region; C. Cooper, Regional Staff Officer, North Eastern Region; H. H. Halliday, Regional Staff Officer, Eastern Region; R. Simpson, Regional Staff Officer, London Midland Region; O. W. Cromwell, Chief Officer for Labour & Establishment, Southern Region; Dr. L. G. Norman, Chief Medical Officer, London Transport Executive; Messrs. S. L. Furnivall, Divisional Engineer, Southern Region, Woking; W. C. Brudenell, Editor, *British Railways Magazine*; J. M. Harrison, Architect, London Midland Region; F. C. Foreman, Heating & Lighting Engineer, Southern Region; G. W. Stewart, District Operating Superintendent, Manchester; F. H. Fisher, District Traffic Superintendent, London Midland Region, Chester; F. Kelland, President, Associated Society of Locomotive Engineers & Firemen; J. G. Baty, Secretary, A.S.L.E.F.; The Chairman of the Llandudno Urban District Council (Councillor A. Macfarlane); The Clerk to the Council (Mr. Reuben D. Jones); Dr. A. Maddock-Jones, Medical Officer of the Home; Canon B. J. Rowlands, Rector of Llandudno.

The following members of the Executive Committee of the L.M.S. Hospital Fund:—Messrs. J. W. Kerr, Fund Trustee; John Inglis, President; F. Billington, Secretary; F. D. Leese; W. E. Wood; George Staff; R. Shepherd; A. Quinn; Ivor Davies.

The following members of the Board of Trustees of the Railway Convalescent Homes:—Messrs. W. F. Smith, Vice President; R. O. Griffiths, Chairman; R. W. J. Canham, Deputy-Chairman; B. H. Bristow; A. L. Crewe, M.B.E.; J. R. Duck; G. H. Nicholson; F. Sadler; J. L. Webster, M.B.E.; F. W. Wheddon; H. Haigh, Secretary; M. Pearson, Assistant Secretary.

The party also included about 150 members of the General Committee of the homes.

Opening Ceremony

At the opening ceremony, the chair was taken by Mr. R. O. Griffiths, who invited Lord Latham to declare the Home open. Lord Latham said that this represented the fulfilment of the desire of women employed on the railway, who number some 43,000, to have a convalescent home for their exclusive use, as the other homes for women, Lavenham, Leasowe, and Margate, accommodated both railwaymen and the wives of railwaymen. He felt that, apart from the beauty of the location, the site was peculiarly suitable by reason of its association with the Old Abbey, which was the type of religious foundation that provided the earliest ministrations to the sick. The purchase and furnishing of the Home had been made possible by the generous gift of £30,000 by the L.M.S. Hospital Fund, the members of which (numbering some 120,000) were all members of the Railway Convalescent Homes, through the regular transfer of a portion of their subscriptions to that institution.

Mr. John Inglis, President of the L.M.S. Hospital Fund, then handed Lord Latham the cheque for £30,000, and Mr. Griffiths expressed the thanks of the Trustees. Councillor A. Macfarlane, Chairman of the Llandudno U.D.C., proposed a vote of thanks to Lord Latham. The Home was then dedicated by the Rt. Rev. the Lord Bishop of Bangor.

Lord Latham afterwards unveiled a bronze memorial plaque in the main entrance hall, commemorating the gift of the L.M.S. Hospital Fund. Lunch was later served at Llandudno.

An interesting feature of the ceremonies was that they were attended by Mr. Charles Willingale (formerly of the Great Eastern Railway) who is the last survivor of the original General Committee of the Homes, and is now in his 89th year.

British Mutual Bank West End Branch.—A branch of the British Mutual Bank will be opened on May 15 at 23, St. James's Street (corner of Ryder Street), S.W.1. This is the first branch of the bank to be opened since its incorporation in 1857, and is necessitated by the number of customers of the bank in the West End.

Saunders Valve Exhibits.—A combined pump and valve display forms the central feature of the Saunders Valve Company's stand at the British Industries Fair, and affords a practical demonstration of the delivery of Safran pumps and the flow and closure of Saunders diaphragm valves. The pump exhibits are representative of both size and type.

General view of Railway Convalescent Home, the Old Abbey, Marine Drive, Llandudno

Notes and News

Sales Departmental Manager Required.—A sales departmental manager is required by a firm of manufacturers with an increasing connection with all types of railway rolling stock. See Official Notices on page 555.

Draughtsmen Required.—A firm in the North Midlands has vacancies for draughtsmen, with a knowledge of rolling stock. See Official Notices on page 555.

Diesel-Mechanical Locomotives.—Tenders are invited by the Western Australian Government Tender Board for 18 only diesel-mechanical locomotives for use on the Western Australian Government Railways. See Official Notices on page 555.

Wagon Shop Foreman Required.—A wagon shop foreman, between 26 and 40 years of age, is required by the Sudan Railways for service in the Sudan. Candidates should have had training and experience on a British railway in the wagon repair shops, or with a steel wagon and coaching underframe builders of repute. See Official Notices on page 555.

Western Region First-Aid Competition.—After First-aid Competitions have been held in each of the 17 districts of the Western Region, the teams which gained the first nine places in the semi-final eliminating rounds competed in the final competition held at Porchester Hall, Paddington, on April 25. The tests were set by Mr. F. H. Edwards, Mr. H. S. Taylor-Young, and Dr. P. F. A. Watkins. Among those present were Mr. W. P. Allen, Member, Railway Executive, and other officers of the Railway Executive and the Western Region. The presentation of prizes was presided over by Mr. K. W. C. Grand, Chief Regional Officer, and the presentations were made by Mrs. Grand. The result of the test was announced by Mr. P. Anstey, Regional Ambulance Secretary, as follows:—Bristol D.S.O. (winners of Challenge Shield), 376; Swindon "C" (winners of Carvell Cup), 353; Taunton "A," 351; Cardiff Docks, 349½; Newport "A," 337; Shrewsbury Locomotive, 336; Weymouth, 324½; Bewdley, 297; Old Oak Common (winners of Butt Bowl for securing first place of any class "2" team), 265. A vote of thanks to the adjudicators was proposed by Mr. W. P. Allen, to the patients and other helpers by Mr. R. Burgoyne, Regional Staff Officer, and to Mr. and Mrs. Grand by Mr. L. A. Webber, Captain of the winning team. Bristol D.S.O. and Swindon "C" teams will represent the Western Region in the British Railways & London Transport (Railways) National Competition, which is being held at Central Hall, Westminster, on May 19.

Works Engineer Required.—Applications are invited for the post of Works Engineer at the Divisional Works, York, in the North Eastern Division of the Road Haulage Executive. See Official Notices on page 555.

British-Caprotti Valve Gear.—In our issue of May 5, reviewing on page 506 a book dealing with the application of the British-Caprotti system of steam distribution, published by Associated Locomotive Equipment Limited, 30, St. James's Square, London, S.W.1, the address of the firm was inadvertently given as 30, St. James's Street.

Display by G. A. Harvey & Company.—A complete range of Harco steel equipment covering modern methods of filing and storekeeping is shown by G. A. Harvey & Co. (London) Ltd. on its Olympia stand at the B.I.F. At the Birmingham section of the Fair this firm is showing steel equipment, heavy products in a wide range, including heavy constructional work, woven wire, and steel plate work.

Moss Gear Company Products.—Industrial gearing and geared units are among the B.I.F. exhibits of the Moss Gear Co. Ltd. The display includes standard fan-cooled and double-reduction worm gear units; single and double helical gears; a turbine speed increasing gearbox fitted with gears of high nickel chrome oil-hardened steel; and geared sleeve couplings. In addition, industrial gear wheels and pinions of worm and helical type are shown.

Institution of Electrical Engineers.—The annual general meeting of the Institution of Electrical Engineers, for Corporate Members and Associates only, will be held at the Institution, Savoy Place, London, W.C.2, at 5.30 p.m. on May 25.

Liverpool Overhead Traffics.—There were further declines in traffics of the Liverpool Overhead Railway during April. The largest setback was in the week ended April 9, when receipts at £2,235 were £511 below those for the equivalent week of 1949. During the week ended April 30 traffics were £2,491, as compared with £2,688 last year and on the aggregate were down by £4,678 at £41,313 for the current seventeen weeks.

Derailment in Bihar.—Seventy-one persons were killed and about 78 injured when a mail train from Calcutta to Delhi was derailed on May 7 near Jasidih Station, Bihar. The locomotive and three coaches ran down an embankment, and the next three coaches were derailed and damaged, but did not overturn. Fishplates were found removed, and the accident is stated to be due to sabotage, with a political motive.

Industrial Truck Development.—Stacatruc and Aerolift fork-lift trucks and Electricar fixed and elevated platform trucks are being exhibited at the I.T.D. stand at the British Industries Fair. Display of this range of equipment has been made possible by an agreement concluded last year whereby a controlling interest in I.T.D. was acquired by the Austin Motor Company and Crompton Parkinson Limited.

Plastics Exhibited at the B.I.F.—Exhibits by Thomas De La Rue & Co. Ltd. in the combined British Plastics Federation stand at the B.I.F. in London include demonstration by a model section through a hotel of the uses of Formica as a decorative surface and the uses of extruded materials in the form of finished articles. At Birmingham the De La Rue stand deals entirely with plastics, including Delaron and Hamofil.

Dumpers and Loaders on View at Castle Bromwich.—A 114B dumper and a loader of increased versatility together with 10B diesel and 10B petrol dumpers of 3 cu. yd. capacity, and the 20B dumper of a capacity of 6½ cu. yd., are shown at the B.I.F. by E. Boydell & Co. Ltd. The largest of the Muir-Hill range of dumpers is the 20B of 6½ cu. yd. capacity capable of taking loads from the largest excavators.

Brush Group Acquires Interest in South Africa.—The Brush group, which in addition to manufacturing large steam turbines, transformers, alternators, diesel locomotives, and so on, at Loughborough, owns and controls Mirrlees, Bickerton & Day Limited, J. & H. McLaren Limited, and Petters Limited, have acquired an interest in the Switchgear & Erection Co. (Pty.) Ltd., Germiston, Johannesburg. This latter company has been re-formed and its title is now the Switchgear & Engineering Corporation of South Africa. It is intended to extend the present range of switchgear and the manufacture of small transformers and motors will soon be introduced. Technical and design facilities of the Brush group

Bristol D.S.O. ambulance team receiving Challenge Shield from Mrs. Grand, wife of Mr. K. W. C. Grand, Chief Regional Officer, Western Region, British Railways (*see paragraph above*)

OFFICIAL NOTICES

Western Australian Government Railways

DIESEL-MECHANICAL LOCOMOTIVES

TENDERS are invited by the Western Australian Government Tender Board for 18 only Diesel-Mechanical Locomotives for use on the Western Australian Government Railways. Conditions of Contract, Drawings and Specifications are available on application at the Office of the Agent General for Western Australia, Savoy House, 115/116, Strand, London, W.C.2. Tenders will close at 2.15 p.m. on Monday, July 10, 1950, at the Office of the Agent General for Western Australia.

Sudan Government

THE Sudan Railways require a Wagon Shop Foreman, aged 26 to 40, for service in the Sudan. The duties consist of the supervision of coach underframe and wagon repairs, including some underframe building, and, from time to time, the supervision of coach body repairs and building and general joinery work. Candidates should have had training and experience on a British Railway in the wagon repair shops, or with a firm of steel wagon and coaching underframe builders of repute. Experience of wood framed coach building and/or coach repair will be considered an added qualification. Appointment will be either on long-term contract for nine years on a salary scale £E396 to £E780, with special post-service gratuity; or on provident fund contract at slightly higher rates of pay and different post-service benefits. Cost-of-living allowance varying between £E180 and £E390 per annum, according to the number of dependents, is at present payable, and, subject to certain limitations, an outfit allowance of £E40 is payable on appointment. There is at present no income tax in the Sudan. Free passage on appointment. Full particulars and application form may be obtained on application to: SUDAN AGENT IN LONDON, Wellington House, Buckingham Gate, London, S.W.1. Please mark envelopes "Wagon Shop Foreman."

will be at the disposal of the new corporation and technical assistants will be provided from England. The existing directors are joining the new board and the management will remain the same. Mr. L. H. L. Badham will continue as Managing Director, Mr. Joseph White, Chairman & Managing Director of Brush (S.A.) Limited, and Mr. Sydney A. Lane, an Executive Director of the Brush Electrical Engineering Co. Ltd., England, are joining the board.

Articulated Railway Vehicles.—The proprietors of certain British Patents relating to articulated railway vehicles are prepared to sell the patents or to license British manufacturers to work thereunder. See Official Notices on this page.

Welding and Cutting Processes.—At the Castle Bromwich section of the B.I.F. the British Oxygen Company is showing a selection of welding and cutting tools. The main attraction on this stand, however, consists of the Argonarc welding process. There are demonstrations of manual Argonarc welding, so showing the practical advantages of this new process. Other demonstrations include the welding of ferrous and non-ferrous metals and the working of oxygen cutting machines.

B.E.T. Omnibus Services Limited.—Profit for the year ended March 31, 1950, of British Electric Traction Omnibus Services Limited was £411,618, against £269,727 for the previous year, which, with balance brought forward of £106,102 and transfer to general reserve of £150,000, leaves £367,720 (£290,227). This is distributed in a 10 per cent. (less tax) cumulative preference and a 12 per cent. (free of tax) ordinary dividend. For the preceding year the total cumulative preference dividend was 7½ per cent. and the total ordinary dividend 9 per cent.

L.M.R. "Best Kept Station" Competition.—A record total of 694 stations has entered for this year's "Best Kept Station" Competition, organised by British Railways, London Midland Region, and in which 208 cash prizes are offered. Judges will make two surprise visits to each station, one in winter and one in summer, and points will be awarded for flower and shrub cultivation, cleanliness of platforms and waiting rooms, and neatness of timetables and posters. As last year, allowance will be made for stations without gardens and those in blitzed, or industrial, areas, so that no station will be handicapped by its environment. Staffs of winning stations will receive prizes when the results are declared at the end of the year. Twenty-four operating districts are represented in the competition and the number of prizes awarded in each district is based on the number of local entrants.

Industrial Preventive Medicine.—A range of anti-dermatitis barrier preparations forms the principal exhibit on the Castle Bromwich stand of Rozalex Limited at the B.I.F. This firm has been engaged in research on this problem for nearly 25 years and now claims to be able to provide a preparation that will guard against most known causative agents of dermatitis.

Institute of Transport.—The following dates have been selected for meetings of the Institute of Transport in London during the session commencing October 1, 1950: October 16, Presidential Address; November 8, anniversary luncheon; November 20, ordinary meeting; December 13, Henry Spurrier Memorial Lecture; December 18, annual general meeting of Corporate Members; January 15, 1951, ordinary meeting; February 12, Brancker Memorial Lecture; February 27, informal luncheon; March 16, annual dinner, March 19, ordinary meeting; April 17, informal luncheon.

English Electric Buys Canadian Interest.—The English Electric Co. Ltd. has bought a controlling interest in the John Inglis Co. Ltd., Toronto, of which the English Electric Co. of Canada Ltd. is a wholly owned subsidiary. The sum involved is about £750,000. The English Electric Company of Canada manufactures electrical machinery and has had commercial and manufacturing relations for many years with The English Electric Co. Ltd. in the United Kingdom. The John Inglis Company manufactures heavy engineering products as well as a variety of consumer appliances. Major J. E. Hahn has agreed to remain President of the John Inglis Company and will continue to administer the activities of that group. Both companies believe that this strengthening of the link between the electrical and allied industries of Canada and the United Kingdom will contribute much to the revival and expansion of reciprocal Anglo-Canadian trade.

Irish Strike Ended.—The strike of locomotive drivers and firemen of Coras Iompair Eireann, which began on April 29 as the result of a dispute at Limerick depot, and caused the suspension of most railway services, was ended on May 4, when conferences were resumed between the company and the men's unions.

Display of "English Electric" Motors.—Five examples of a new range of totally-enclosed fan-cooled squirrel-cage motors are shown by The English Electric Co. Ltd. at the B.I.F. These are known as LJ type and they have been designed for use in dusty and dirty situations. The exhibits comprise 3-h.p., 5-h.p., 9-h.p., 10-h.p., and 25-h.p. examples of the LJ range, which can be used on 400/420 volts, 3-phase, 50-cycle supply systems. The machines are designed to ensure a good starting torque with high power factor and high efficiency. The range is specially suitable for applications to boiler house drives, machine tools, foundries, and so on.

Casting for New G.E.C. Traction Motor.—A steel casting for the shell of a traction motor for one of the 40 North British-G.E.C. electric locomotives for South Africa is exhibited at the Castle Bromwich section of the British Industries Fair by Edgar Allen & Co. Ltd. by whom these castings are being produced. The casting weighs 4,000 lb. before machining and is 3 ft. 8 in. high by 2 ft. 6 in. long. There will be six traction motors in each locomotive, and they are believed to be the most powerful ever accommodated in a design for a 3 ft. 6 in. gauge railway, the loco-

motive rating being 3,050 h.p. The motors and all other electrical equipment for the locomotives are being built by the General Electric Co. Ltd. and the order for the locomotives was placed with the North British Locomotive Co. Ltd.

Rimutaka Incline.—In the article in our May 5 issue the Rimutaka Incline in New Zealand was stated to be rack-operated. It is, in fact, worked on the Fell centre-rail system.

British Railways Gas Turbine Locomotive in Service.—At the invitation of the Railway Executive representatives of the technical press inspected the experimental gas turbine locomotive No. 18000 at Paddington Station on May 10. This unit was described and illustrated in our May 5 issue. The locomotive was placed in service on the Western Region on the same day, working the London-Swindon service, leaving Paddington at 2.15 p.m. The unit will remain on this service for a short period.

Brockhouse Equipment at Castle Bromwich.—A number of the companies of the Brockhouse group are represented at the B.I.F. and the exhibits include a wide range of products including axles and springs and various examples of undergear for transport equipment. Specimens of drop forgings in carbon and alloy steels, from a few ounces to 150 lb. in weight, are on view, together with forgings from horizontal upsetting machines. There are also examples of railway iron and steel work and machine tools.

Institute of Transport Continental Visit.—The Institute of Transport has announced the detailed arrangements for this year's Continental visit, which is to Italy, Austria, and Switzerland. The provisional programme includes departure from London on June 12, travel *via* Calais and Basle, and arrival in Milan the next day. The party will stay in Milan, Merano, Innsbruck, and Basle, and will arrive back in London on June 24. Visits will be made in Milan, Innsbruck, and Basle to railway and other installations, and there will be sightseeing tours. The inclusive fare is £59 10s. per person. All travel arrangements are being handled by Thos. Cook & Son Ltd.

Forthcoming Meetings

Until May 14 (*Sun.*).—Liege International Fair: Mining, Metallurgy, Mechanical and Electrical Engineering.

May 12 (*Fri.*).—Institution of Locomotive Engineers, summer meeting at Swindon. Party assembles at Paddington Station for special train due to depart approximately at 11.50 a.m.

May 13 (*Sat.*).—Permanent Way Institution, London Section, visit to Severn Tunnel Pumping Station. Leave Paddington Station 8.55 a.m.

May 13 (*Sat.*).—Permanent Way Institution, Manchester & Liverpool Section, at the Temperance Institute, London Road, Southport, at 2.30 p.m. Lecture & Exhibition. "High Speed Tools for High Speed Track," by Mr. E. H. Tustain, of Abtus Limited.

May 13 (*Sat.*) to 21 (*Sun.*).—Stephenson Locomotive Society, Spring tour of railways, works, and running sheds in Eire and Northern Ireland.

May 18 (*Thu.*) to 21 (*Sun.*).—British Institute of Management, Spring Management Conference at Cliftonville, near Margate.

Railway Stock Market

Despite over-subscription of the £150,000,000 British Electricity issue, markets were dull and uncertain; British Funds turned easier owing to absence of improvement in demand. It is believed that the success of the British Electricity issue was due mainly to large applications by Government departments, but now this big issue has been made, markets may gradually strengthen. The prevailing view is that British Funds are now more likely to improve than to decline; but at present sentiment generally seems affected by technical difficulties in the Kaffir section.

Business in foreign rails has been modest, but prices tended to improve. Great Western of Brazil strengthened to 142s. 6d. in hopes that the pay-out will be made to shareholders before the autumn, and this may be equal to more than 155s. per share. Leopoldina stocks firmed up now that the pay-out scheme has been approved. Buyers were attracted by the fact that current market prices are below pay-out levels, though a buyer would have to pay brokerage and other expenses. At the time of going to press, Leopoldina ordinary have improved to 9½, the preference to 25¼, and the 4 per cent. debentures to 93½, while the 6½ per cent. debentures were 133. Leopoldina Terminal 5 per cent. debentures were 90 and the ordinary units around 1s. 9d. San Paulo were less active though firm at 16s.

There was renewed activity in United of Havana stocks on the latest reports from Cuba, which might indicate a take-over offer direct from the Cuban Government, though talk of nationalisation must be regarded at this stage merely as a rumour. Speculation in United of Havana is due to the market belief that any fair offer, whether from the Cuban Government or from the Cuban-U.S. group which has been considering a take-over scheme, would have to be on a basis above current market prices for the stocks. The 1906 debentures have continued to fluctuate, but have rallied to 26½, while the Cuban 4½ per cent. debentures were also better at 52½, and Havana Terminal 5 per cent. debentures 85¼. Chilian Northern 5 per cent. debentures marked 32 and La Guaira Caracas 5 per cent. debentures 81½. While Pass Yukon 5 per cent. debentures were 182½. Canadian Pacifics remained active around 29¾, the preference stock being 69½ and the 4 per cent. debentures 96¼.

Antofagasta ordinary and preference were 7¼ and 42 respectively. Nitrate Rails were 72s. 6d., while Manila "A" debentures were 86, and the 5 per cent. preference shares 8s. 9d. Mexican Central "A" bonds showed firmness at 37.

Road Transport shares were firm generally and tightly held because of their good investment merits and of the sound grounds for assuming that, should there be further acquisitions by British Transport, the terms would be above current market prices, bearing in mind that in most instances current prices of the shares are moderate both in the value of assets and in earning power.

Iron and steel shares continued to attract more attention. Buying was attributed partly to the good yields and partly to the growing belief that nationalisation may not take place. Moreover, the decision to keep steel prices at current levels, despite rising costs, was regarded as indicating confidence in the future despite growing competition abroad. The good results announced by leading concerns arise in a large measure from the big development plans initiated by these concerns, which have already played a big part in expanding production. In some cases the question of more capital has to be faced; this could be raised on favourable terms, were it not for the threat of nationalisation, which makes it difficult to obtain permanent finance.

Stewarts and Lloyds have risen further to 54s. 6d. on further consideration of the financial results, while Guest Keen were up to 44s. 6d., after the jubilee bonus news. United Steel improved to 25s. 4½d. and T. W. Ward were firm at 57s. 6d.

Locomotive builders' and engineers' shares were less active, but held recent gains. Vulcan Foundry were 20s., North British Locomotive 18s. 1½d., Beyer Peacock 21s., Gloucester Wagon 47s. 6d., and Wagon Repairs 5s. shares 16s. 9d. Birmingham Wagon were 29s., Hurst Nelson 58s. 9d., North Central Wagons 13s., and Charles Roberts 81s. 3d.

Traffic Table of Overseas and Foreign Railways

	Railway	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: Inc. or dec. compared with 1947/48	No. of weeks	Aggregate traffics to date: Total 1948/49	Aggregate traffics to date: Increase or decrease
				£	£		£	£
South & Central America	Antofagasta ...	811	30.4.50	86,730 +	20,710	17	1,029,744 —	120,310
	Costa Rica	281	Mar., 1950	c991,660 —	c106,988	39	c7,596,462 —	c1,523,421
	Dorada	70	Mar., 1950	48,466 +	17,609	13	126,471 +	35,901
	Inter. Ctl. Amer. ...	794	Mar., 1950	$1,310,388 +	$114,029	13	$3,778,654 +	$493,309
	La Guaira	22¾	Apr., 1950	$81,912 —	$40,809	17	$345,161 —	$107,313
	Nitrate	382	30.4.50	16,483 +	876	17	159,578 +	20,352
	Paraguay Cent. ...	274	21.4.50	₲178,920 +	₲67,659	42	₲6,101,776 +	₲1,737,542
	Peru Corp. ...	1,050	Mar., 1950	$7,191,700 +	$2,915,939	39	$53,397,058 +	$17,361,599
	" (Bolivian Section)	66	Mar., 1950	Bs.5,608,500 —	Bs.3,076,230	39	Bs.87,346,664 +	Bs.10,603,167
	Salvador	100	Febr., 1950	c239,000 —	c72,000	35	c1,300,000 —	c139,000
	Taltal	154	Mar., 1950	17,595 +	6,185	39	120,640 +	40,300
Canada	Canadian National†	23,473	Mar., 1950	14,955,000 +	1,143,000	13	38,890,000 +	341,000
	Canadian Pacific† ...	17,037	Mar., 1950	10,743,000 +	446,000	13	27,726,000 —	793,000
Various	Barsi Light* ...	167	Mar., 1950	34,522 +	3,022	52	358,762 +	22,275
	Egyptian Delta ...	607	20.3.50	17,981 —	329	51	663,540 —	43,842
	Gold Coast... ...	536	Feb., 1950	234,159 —	6,199	48	2,547,700 +	163,306
	Mid. of W. Australia	277	Feb., 1950	30,534 +	3,578	35	242,095 +	12,087
	Nigeria	1,900	Jan., 1950	502,360 +	38,978	44	5,017,814 +	266,573
	South Africa ...	13,347	15.4.50	1,504,401 +	137,150	2	3,227,984 +	139,053
	Victoria	4,744	Jan., 1950	2,000,259 +	490,658	31	—	—

* Receipts are calculated @ 1s. 6d. to the rupee

† Calculated at $3 to £1